

Exhibit 1

Karma M. Giulanelli (SBN 184175)
BARTLIT BECK LLP
1801 Wewatta St., Suite 1200
Denver, CO 80202
Telephone: (303) 592-3100
Facsimile: (303) 592-3140
karma.giulianelli@bartlitbeck.com

Hae Sung Nam (*pro hac vice*)
KAPLAN FOX & KILSHEIMER LLP
850 Third Avenue
New York, NY 10022
Telephone: (212) 687-1980
Facsimile: (212) 687-7715
hnam@kaplanfox.com

Interim Co-Lead Counsel for the Proposed Class

[Additional Counsel on Signature Page]

**UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN FRANCISCO DIVISION**

IN RE GOOGLE PLAY CONSUMER ANTITRUST LITIGATION

RELATED ACTIONS:

Epic Games Inc. v. Google LLC et al.,
Case No. 3:20-cv-05671-JD

In re Google Play Developer Antitrust Litigation, Case No. 3:20-cv-05792-JD

State of Utah, et. al., v. Google LLC, et. al.,
Case No. 3:21-cv-05227-JD

No. 3:20-CV-05761-JD

CONSOLIDATED SECOND AMENDED CLASS ACTION COMPLAINT

JURY TRIAL DEMANDED

Judge: Hon. James Donato

TABLE OF CONTENTS

1	INTRODUCTION	1
2	PARTIES	7
3	A. Plaintiffs	7
4	B. Defendants	9
5	JURISDICTION & VENUE.....	10
6	FACTUAL ALLEGATIONS	11
7	I. THE RELEVANT MARKETS.....	11
8	A. The Licensable Mobile Operating System Market	11
9	B. The Android Application Distribution Market	13
10	C. The In-App Aftermarket	14
11	II. GOOGLE HAS MONOPOLY POWER IN THE MARKETS FOR LICENSABLE MOBILE OPERATING SYSTEMS AND IN THE ANDROID APPLICATION DISTRIBUTION MARKET	16
12	A. Google’s Monopoly Power Over the Market for Licensable Mobile Operating Systems	16
13	B. Google’s Monopoly Power in the Android Application Distribution Market	18
14	III. GOOGLE UNLAWFULLY MAINTAINS A MONOPOLY IN THE ANDROID APPLICATION DISTRIBUTION MARKET	24
15	A. Google’s Anticompetitive Agreements Imposed on OEMs and Mobile Network Operators Foreclose Competitors in the Android Application Distribution Market.....	24
16	i. Anticompetitive MADA Restrictions Requiring OEMs to Preload and Preference Google Play and Preventing OEMs from Pre- Loading Any Software Google Deems to “Interfere” with Android.	26
17	ii. Revenue Sharing Agreements with Mobile Network Carriers and OEMs	30
18	B. Google’s Anticompetitive Agreements Imposed on Developers Foreclosing Competition in the Android Application Distribution Market.....	33
19	C. Google’s Imposition of Unnecessary Technical Barriers Further Foreclosing Competition in the Android Application Distribution Market.....	35
20	D. Anticompetitive Effects in the Android Application Distribution Market	39
21	IV. GOOGLE UNLAWFULLY MAINTAINS A MONOPOLY IN THE IN-APP AFTERMARKET	41

1	A.	Google's Anticompetitive Conduct in the In-App Aftermarket	41
2	B.	Google's Monopoly Power in the In-App Aftermarket.....	45
3	C.	Anticompetitive Effects in the In-App Aftermarket	46
4	V.	ANTITRUST INJURY	47
5	VI.	CLASS ALLEGATIONS	48
6	CLAIMS	50	
7	A.	Claims for a Nationwide Class	50
8	B.	California Claims for a Nationwide Class and, in the Alternative, a Repealer State Class.....	60
9	PRAAYER FOR RELIEF	74	
10	JURY TRIAL DEMAND	74	

1 Plaintiffs Mary Carr, Daniel Egerter, Zach Palmer, Serina Moglia, Matt Atkinson, Alex
2 Iwamoto, and Leigh Silver on behalf of themselves and all others similarly situated, bring this
3 class action against Defendants Google, LLC, Google Ireland Ltd., Google Commerce Ltd.,
4 Google Asia Pacific Pte. Ltd., and Google Payment Corp. (collectively, “Google”), and allege as
5 follows:

6 **INTRODUCTION**

7 1. Consumers and businesses worldwide rely on smart mobile devices such as
8 smartphones and tablets for work, news, entertainment, and communication. To function, these
9 mobile devices require an operating system (“mobile OS”). Google controls the most pervasive
10 mobile OS available to original equipment manufacturers (“OEMs”) to license, Google’s Android
11 OS, and it has monopoly power over the market for licensable operating systems for mobile devices.

12 2. The commercial viability of a mobile OS depends in large part on the availability,
13 number, and variety of compatible software products known as mobile applications or “apps” for
14 consumers to download and use. Apps allow users to personalize their device according to their
15 specific needs and interests. A mobile device that provides seamless access to and use of a wide
16 variety of apps is valuable to consumers across the globe.

17 3. Google, unsatisfied with controlling the market for licensable mobile OSs, has
18 erected contractual and technological barriers to monopolize the market for app distribution for
19 licensable OSs and the aftermarket for the distribution of and payment for in-app products.

20 4. As a result, the Google Play Store (previously known as the Android Marketplace),
21 which is Google’s online platform where app developers make their apps available for download
22 and sale to Android users, accounts for nearly all app downloads from app stores on Android mobile
23 devices, and all, or nearly all, distribution of additional products (in-app products) sold to enhance
24 the initial application. In addition, Google’s payment system, Google Play Billing, must be used to
25 transact all subsequent in-app purchases, allowing Google to impose its anticompetitive contractual
26 restriction that developers pay Google—and Google alone—a toll for every purchase made through
27 the app, forever.

1 5. Google has unlawfully maintained a monopoly over the market for distributing
2 mobile apps to users of Android mobile devices (hereafter, the “Android Application Distribution
3 Market”), as well as a monopoly in the aftermarket for distribution of and associated payment
4 systems for digital accessories or enhancements to those applications (hereafter, the “In-App
5 Aftermarket”).

6 6. Google’s anticompetitive scheme spans years and has been pursued through
7 multiple means, all designed to exclude competition in the Android Application Distribution Market
8 and the In-App Aftermarket. Google’s conduct includes anticompetitive contractual restrictions
9 imposed on OEMs and developers; bribes to competitors and potential competitors to forego direct
10 competition with the Google Play Store; paying off distribution channels to exclusively distribute
11 Google Play; requiring developers who need critical advertising channels to distribute their
12 applications through the Google Play Store; displaying deceptive and ominous warnings about
13 alternative methods of distribution; and blocking rivals and developers who choose not to distribute
14 through the Google Play Store from obtaining critical functionality to operate.

15 7. Google’s exclusionary conduct begins with a series of OEM restrictions. Any OEM
16 that desires to pre-load any one of Google’s critical applications—such as Google Maps, Gmail,
17 Google Search, YouTube, or a myriad of other applications that come in what Google calls the
18 “Google Mobile Services” (“GMS”) suite of applications—must load the *entire* bundle, including
19 the Google Play Store. Google requires OEMs not only to pre-install the Google Play Store on their
20 mobile devices as a condition for licensing Google’s Android OS with its accompanying GMS
21 suite, but also to locate the Google Play Store on the home page of each mobile device. These
22 restrictions in Google’s OEM agreements interfere with an OEM’s ability to make other third-party
23 app stores or apps easily accessible on their devices and practically block competitive stores from
24 obtaining preferential placement, effectively foreclosing competing app stores—and even single
25 apps—from the most effective and efficient distribution channel.

26 8. Not content with controlling OEMs to effect its anticompetitive scheme of
27 monopolizing the Android Application Distribution Market, Google also imposes anticompetitive
28 restrictions on app developers. Specifically, Google contractually prohibits app developers from

1 offering an app through the Google Play Store that could be used to download other apps, or even
2 directing users to other sources for downloading their apps. In addition, Google forever prohibits
3 developers from using information about those customers they obtained through the Google Play
4 Store making it impossible for developers to directly reach customers to offer alternatives to Google
5 Play Store.

6 9. Additionally, developers cannot use the Google-controlled advertising channels to
7 advertise mobile apps, such as ad placements on Google Search or YouTube, unless they distribute
8 their apps through the Google Play Store. Because of Google's market power in internet search, the
9 bundling of the GMS suite of applications and the requirement for prominent placement on Android
10 mobile devices, app developers must acquiesce to Google's anticompetitive restrictions for the
11 Google Play Store.

12 10. Google has not limited its anticompetitive scheme to OEM and developer
13 restrictions, however. It also invokes contrived security concerns to justify stifling—or outright
14 blocking—consumers' ability to download alternative app stores and apps directly from developers'
15 websites. Downloading apps on an Android mobile device outside of the Google Play Store requires
16 multiple steps including, among other things, changing the device's default settings after
17 acknowledging multiple warnings advising users that doing so could harm their device. Even if a
18 tech-savvy user runs this gauntlet and manages to install a competing app store, Google protects
19 the Google Play Store's competitive advantage by blocking the alternative store from offering basic
20 functions, such as automatic "background" updates of the kind seamlessly available for apps
21 downloaded from Google Play Store.

22 11. Not only does Google erect needless technological hoops to direct downloading, but
23 it has also restricted any modification of the operating system code that would facilitate such
24 downloading. These "anti-forking" restrictions, along with Google's needless barriers and
25 warnings, practically foreclose an app developer's ability to distribute its applications through any
26 other source except the Google Play Store.

27 12. Through its behavior, Google intends to—and does—eliminate consumer choice,
28 foreclosing competition in the Android Application Distribution Market. Not even the likes of

1 Amazon—specifically targeted by Google through its anticompetitive conduct—has succeeded in
2 breaking through Google’s web of barriers that prevent competition on the merits.

3 13. Google leverages its ill-found power in the Android Application Distribution Market
4 to impose anticompetitive restrictions in the In-App Aftermarket. Once an application has been
5 downloaded to the user’s device, the app developer may offer content, such as accessories for digital
6 game play, upgrades to the app, advertisement-free app usage, subscriptions, or other digital
7 products for sale within the app itself. These in-app purchases use payment systems that offer users
8 of Android mobile devices a variety of payment options. An app developer can create its own
9 payment processing system, or the developer could theoretically utilize a payment processing tool
10 offered by third parties, such as Intuit or Stripe.

11 14. But Google forecloses this market through additional exclusionary practices. It
12 conditions the right to distribute an app through the Google Play Store on a developer’s agreement
13 to exclusively use the Google Play Store and Google Play Billing, Google’s payment system, for
14 all subsequent sales to its customers, enforced through the requirement that the developer use
15 Google Play Billing for all aftermarket in-app payments. This restriction prevents developers from
16 using their own or any non-Google payments system to transact in-app purchases. But for these
17 restrictions, developers could use other, much less costly tools to process user payments through a
18 variety of payment options, ranging from credit cards and debit cards to online wallets or digital
19 payment mechanisms like PayPal, Intuit, or Stripe. Providers of these services compete based on
20 price, range of services, and the extent to which user information is protected, aggregated, or sold
21 in the In-App Aftermarket.

22 15. By conditioning an app’s access to the Google Play Store on the use of Google Play
23 Billing for all aftermarket transactions, Google is not only able to ensure that it extracts its supra-
24 competitive toll forever, but in so doing, it forecloses competition from alternative payment systems
25 that could otherwise integrate with alternative app distribution channels, whether through a
26 developers’ direct relationships with their customers, or competitive third-party stores.

27 16. Because of Google’s restrictions, app developers cannot offer users other payment
28 processing options alongside, or instead of, Google Play Billing. This forces app developers who

1 distribute *once* through the Google Play Store to use it, and Google Play Billing, *in perpetuity*. In
 2 short, Google’s use of its monopoly over the Android App Distribution Market to force developers
 3 to use Google Play Billing allows it to enforce one of its most pernicious restrictions: requiring
 4 developers (and, therefore, consumers) to pay the Google toll forever. This contractual restriction,
 5 an unreasonable restraint of trade standing alone, also forecloses competition in the In-App
 6 Aftermarket, preventing developers from transacting with their customers directly, or from
 7 employing alternative platforms to handle in-app purchases that occur after the download of the
 8 initial applications—sometimes months, or even years after.

9 17. Google’s decision to tie its market power in the Android Application Distribution
 10 Market to the In-App Aftermarket by requiring developers to use Google Play Store and Google
 11 Play Billing allows Google to charge an exorbitant, supra-competitive rate, as high as 30% of *every*
 12 *purchase*,¹ which is up to ten times higher than the toll charged by payment processing providers,
 13 and multiples higher than what developers would pay in a competitive world where there would be
 14 a choice of avenues through which they could interact and arrange payment with their customers.
 15 Internally, Google freely admits that its “rev share @ 30%” has “[n]o rationale,” and is an “arbitrary
 16 fee.”

17 18. Moreover, this tax never ends—it applies to every subsequent in-app purchase made
 18 through the initial app download, even where Google Play has little or nothing to do with the in-
 19 app distribution. As a result, consumers pay more for applications and in-app purchases than they
 20 would in a competitive market. For every in-app purchase, just as for an initial app purchase,
 21 consumers pay Google, not the app developer. Google then taxes the transaction at the exorbitant

22 1 After years of charging 30% for all subscription purchases, Google modified its subscription fee in January
 23 of 2018. Though the decreased fee—to 15% for subscribers retained after 12 paid months—is still well
 24 above the levels that would be set by competition, it only shows Google’s ability to profitably cut its fee *in*
half. Indeed, faced with regulatory and legal pressure, Google will lower its subscription fee yet again
 25 as of January 1, 2022, to 15% for all subscribers, not just those retained after 12 paid months.
 26 Responding to the same pressure, Google recently announced another modification to what it has internally
 27 called its “arbitrary” fee. As of July 1, 2021, Google allowed developers to register for a 15% service fee,
 28 but only on the first \$1 million on annual revenue they generate through the Google Play Store. This
 modification, though, has very little impact on the enormous supra-competitive profits Google reaps, as it
 applies to a very small fraction of the dollars consumers spend year after year on application purchases. It,
 too, only underscores the magnitude of Google’s inflated 30% fee.

1 rate of up to 30%, remitting the remainder to the developer who is responsible for setting the
2 purchase price to the consumer (subject to Google's requirement that non-zero-priced products be
3 sold for no less than \$0.99, preventing developers from selling lower-priced applications to
4 consumers).

5 19. Google's never-ending toll amounts to billions of dollars a year that should have
6 stayed in consumers' pockets.

7 20. Google's anticompetitive restrictions on developers, however, have even more far-
8 reaching effects. Maintaining a chokehold on all transactions related to in-app purchases allows
9 Google to further embed its tentacles throughout the entire Android ecosystem. By requiring the
10 use of Google Play Billing and interposing itself in every digital content purchase conducted within
11 an Android mobile device-distributed app, Google collects information regarding user purchases
12 and preferences, including names, email addresses, billing addresses, and purchase history, than it
13 would not otherwise receive. And significantly, Google excludes other payment processing
14 providers from gathering Android user information which hinders the ability of potential payment
15 processing competitors from providing necessary services to developers.

16 21. But for Google's monopolistic conduct, competitors could offer consumers and
17 developers choices to handle in-app purchases including payment processing. Entities wishing to
18 distribute apps through a competing app store could offer developers greater innovation and
19 enhanced choices, including the option to transact their aftermarket purchases directly with their
20 customers or through some other payment system of their own choosing. With other viable options,
21 app developers would not have had to pay Google's supra-competitive tax of 30% on all purchases
22 for every distinct product sold within the app itself, which in turn has inflated prices paid by
23 Plaintiffs and the Class.

24 22. Absent Google's web of anticompetitive conduct, described below, including
25 restrictions on OEMs and application developers, prices would be set by market forces to the benefit
26 of consumers and developers; more apps would be sold, and quality and innovation would increase.
27
28

PARTIES

A. Plaintiffs

23. Plaintiff Mary Carr is a natural person who resides in the State of Washington. Ms. Carr purchased one or more apps through the Google Play Store; and, also purchased in-app digital content through one or more apps offered in the Google Play Store from August 16, 2016, to the present, and paid Google directly for these purchases. Ms. Carr is (1) a proposed representative of the national class asserting claims under the federal antitrust laws; (2) a proposed representative of a national class asserting claims under California's Cartwright Act (Cal. Bus. & Prof. Code §§16700 et seq.) or, in the alternative, a proposed representative for Cartwright Act claims for states whose law provides for antitrust recovery for indirect purchasers ("Repealer States"); and (3) a proposed representative of a national class asserting claims under California's Unfair Competition Law (Cal. Bus. & Prof. Code §§ 17200, et seq.) (referred to herein as "Section 17200" or the "UCL").

24. Plaintiff Daniel Egerter is a natural person who resides in the State of California. Mr. Egerter purchased one or more apps through the Google Play Store; and, also purchased in-app digital content through one or more apps offered in the Google Play Store from August 16, 2016, to the present, and paid Google directly for these purchases. Mr. Egerter is (1) a proposed representative of the national class asserting claims under the federal antitrust laws; (2) a proposed representative of a national class asserting claims under the Cartwright Act or, in the alternative, a proposed representative for Cartwright Act claims for Repealer States; and (3) a proposed representative of a national class asserting claims under the UCL.

25. Plaintiff Zack Palmer is a natural person who resides in the State of Massachusetts. Mr. Palmer purchased one or more apps through the Google Play Store; and, also purchased in-app digital content through one or more apps offered in the Google Play Store from August 16, 2016 to the present, and paid Google directly for these purchases. Mr. Palmer is (1) a proposed representative of the national class asserting claims under the federal antitrust laws; (2) a proposed representative of a national class asserting claims under the Cartwright Act or, in the alternative, a proposed representative for Cartwright Act claims for Repealer States and (3) a proposed representative of a national class asserting claims under the UCL.

1 26. Plaintiff Serina Moglia is a natural person who resides in the State of New York.
2 Ms. Moglia made one or more purchases of in-app digital content through one or more apps offered
3 in the Google Play Store from August 16, 2016 to the present and paid Google directly for these
4 purchases. Ms. Moglia is (1) a proposed representative of the national class asserting claims under
5 the federal antitrust laws; (2) a proposed representative of a national class asserting claims under
6 the Cartwright Act or, in the alternative, a proposed representative for Cartwright Act claims for
7 Repealer States and (3) a proposed representative of a national class asserting claims under the
8 UCL.

9 27. Plaintiff Matthew Atkinson is a natural person who resides in the State of Wisconsin.
10 Mr. Atkinson made one or more purchases of in-app digital content through one or more apps
11 offered in the Google Play Store from August 16, 2016 to the present and paid Google directly for
12 these purchases. Mr. Atkinson is (1) a proposed representative of the national class asserting claims
13 under the federal antitrust laws; (2) a proposed representative of a national class asserting claims
14 under the Cartwright Act or, in the alternative, a proposed representative for Cartwright Act claims
15 for Repealer States and (3) a proposed representative of a national class asserting claims under the
16 UCL.

17 28. Plaintiff Alex Iwamoto is a natural person who resides in the State of Georgia. Mr.
18 Iwamoto purchased one or more apps through the Google Play Store; and, also purchased in-app
19 digital content through one or more apps offered in the Google Play Store from August 16, 2016 to
20 the present, and paid Google directly for these purchases. Mr. Iwamoto is (1) a proposed
21 representative of the national class asserting claims under the federal antitrust laws; (2) a proposed
22 representative of a national class asserting claims under the Cartwright Act; and (3) a proposed
23 representative of a national class asserting claims under the UCL.

24 29. Plaintiff Leigh Silver is a natural person who resides in the State of Maine. Ms.
25 Silver made one or more purchases of in-app digital content through one or more apps offered in
26 the Google Play Store from August 16, 2016 to the present and paid Google directly for these
27 purchases. Ms. Silver is (1) a proposed representative of the national class asserting claims under
28 the federal antitrust laws; (2) a proposed representative of a national class asserting claims under

1 the Cartwright Act or, in the alternative, a proposed representative for Cartwright Act claims for
 2 Repealer States and (3) a proposed representative of a national class asserting claims under the
 3 UCL.

4 30. All proposed national class representatives and members of the nationwide Class
 5 purchased apps and/or made in-app purchases directly from Google. When consumers obtain
 6 applications, they do so directly from the Google Play Store, and when they pay for those
 7 applications or in-app content, they do so directly to Google through Google Play Billing. Because
 8 the proposed nationwide class representatives and members of the nationwide class paid Google
 9 directly for these purchases, they have federal antitrust claims. *See Apple v. Pepper*, 139 S. Ct. 1514
 10 (2019). Google has judicially admitted in the case brought by application developers that consumers
 11 are direct purchasers and may assert overcharge damages under the federal antitrust laws. *See*
 12 Google's Separate Memorandum of Points and Authorities Re: Defendants' Motion To Dismiss
 13 Developers' Claim For Damages (ECF No. 91-1). In this case, however, Google has refused to
 14 stipulate that Plaintiffs and the Class are direct purchasers.

15 31. Each of the Plaintiffs named above are proposed national class representatives for
 16 federal antitrust claims and proposed representatives of a national class for the Cartwright and
 17 Unfair Competition claims alleged in this Complaint. Alternatively, each of these proposed national
 18 class representatives would litigate Cartwright Act claims by representing a class of plaintiffs in
 19 Repealer States (*i.e.*, states whose law permits indirect purchaser standing and provides for antitrust
 20 recovery for indirect purchasers).

21 **B. Defendants**

22 32. Defendant Google, LLC is a Delaware limited liability company with its principal
 23 place of business in Mountain View, California. Google, LLC is the primary operating subsidiary
 24 of the publicly traded holding company Alphabet Inc. The sole member of Google, LLC is XXVI
 25 Holdings, Inc., a Delaware corporation with its principal place of business in Mountain View,
 26 California. Since 2005, Google, LLC has owned and developed the Android OS for use in Android-
 27 licensed mobile devices. Google, LLC is also the owner of the Google Play Store. Google, LLC
 28

1 contracts with all app developers that distribute their apps to consumers through the Google Play
2 Store; and, is therefore, a party to the anticompetitive contractual restrictions at issue in this suit.

3 33. Defendant Google Ireland Limited (“Google Ireland”) is a limited liability company
4 organized under the laws of Ireland with its principal place of business in Dublin, Ireland, and is a
5 subsidiary of Google, LLC. Google Ireland contracts with all app developers that distribute their
6 apps through the Google Play Store; and, is therefore, a party to the anticompetitive contractual
7 restrictions at issue in this suit.

8 34. Defendant Google Commerce Limited (“Google Commerce”) is a limited liability
9 company organized under the laws of Ireland with its principal place of business in Dublin, Ireland,
10 and is a subsidiary of Google, LLC. Google Commerce contracts with all app developers that
11 distribute their apps through the Google Play Store; and, is therefore, a party to the anticompetitive
12 contractual restrictions at issue in this suit.

13 35. Defendant Google Asia Pacific Pte. Limited (“Google Asia Pacific”) is a private
14 limited liability company organized under the laws of Singapore with its principal place of business
15 in Mapletree Business City, Singapore, and is a subsidiary of Google, LLC. Google Asia Pacific
16 contracts with all app developers that distribute their apps through the Google Play Store; and, is
17 therefore, a party to the anticompetitive contractual restrictions at issue in this suit.

18 36. Defendant Google Payment Corp. (“Google Payment”) is a Delaware corporation
19 with its principal place of business in Mountain View, California, and is a subsidiary of Google,
20 LLC. Google Payment provides in-app payment processing services to Android app developers and
21 Android users and collects a 30% commission on many types of processed payments, including
22 payments for apps sold through the Google Play Store and in-app purchases made within such apps.

JURISDICTION & VENUE

24 37. This Court has subject-matter jurisdiction over Plaintiffs' federal antitrust claims
25 pursuant to the Clayton Antitrust Act, 15 U.S.C. § 26, and 28 U.S.C. §§ 1331 and 1337. The Court
26 has supplemental jurisdiction over Plaintiffs' Cartwright Act claims and unfair competition claims
27 under California's UCL (Section 17200) pursuant to 28 U.S.C. § 1337.

38. This Court has personal jurisdiction over Defendants. Google, LLC and Google Payment are headquartered in this District. All Defendants have had sufficient minimum contacts with the United States, and purposefully availed themselves of the benefits and protections of United States and California law, such that the exercise of jurisdiction over them comports with due process requirements. Further, Defendants consented to the exercise of personal jurisdiction by this Court.

39. Venue is proper in this District pursuant to 28 U.S.C. § 1391(b); because Google, LLC and Google Payment maintain their principal places of business in the State of California and in this District; because a substantial part of the events or omissions giving rise to Plaintiffs' claims occurred in this District; and because, pursuant to 28 U.S.C. § 1391(c)(3), any Defendant not residing in the United States may be sued in any judicial district and their joinder with others shall be disregarded in determining proper venue.

40. In the alternative, personal jurisdiction and venue are also proper under Section 12 of the Clayton Antitrust Act, 15 U.S.C. § 22, because Defendants may be found in or transact business in this District.

FACTUAL ALLEGATIONS

I. THE RELEVANT MARKETS

41. Google's anticompetitive conduct spans (1) the Licensable Mobile Operating System Market; (2) the Android Application Distribution Market; and (3) the In-App Aftermarket.

A. The Licensable Mobile Operating System Market

42. Mobile devices require an OS that enables multi-purpose computing functionality, including, but not limited to (1) button, touch, and motion commands; (2) a “graphical user interface” made up of icons allowing the user to take action; (3) basic operations such as cellular or WiFi connectivity, GPS positioning, camera and video recording, and speech recognition; and (4) the installation and operation of compatible mobile apps.

43. Mobile devices cannot be used by purchasers without an OS that controls the device and serves as a platform for other apps and functions.

1 44. In addition to providing basic functions for mobile device users, an OS provides a
 2 software development platform for app developers. An OS contains code, including application
 3 programming interfaces (“APIs”), that allows developers to write apps that run on the OS and are
 4 compatible with other apps or platforms an OS developer distributes or bundles with its OS.

5 45. An OEM must pre-install an OS on each mobile device prior to its sale so that
 6 purchasers immediately have access to basic functions like the ones described above.

7 46. Mobile device manufacturers have two options for an OS: (1) they can develop their
 8 own OS, or (2) they can license an OS. The vast majority of OEMs do not develop their own OS,
 9 so they must choose and license an OS for their devices. There is, therefore, a relevant market for
 10 licensable mobile operating systems for OEMs to install on their mobile devices.²

11 47. Historically, this market included the Android OS, developed by Google; the Tizen
 12 mobile OS, a partially open-source mobile OS that was developed by the Linux Foundation and
 13 Samsung; and the Windows Phone OS developed by Microsoft. Apple’s iOS is a broadly-used
 14 mobile OS in the United States, but it is not licensed by Apple to other mobile device manufacturers.

15 48. Licensable smart mobile operating systems are a relevant antitrust market. Although
 16 desktop and laptop computers, and game consoles also use operating systems, those operating
 17 systems are not compatible with smart mobile devices, and neither computers nor game consoles
 18 are substitutes for mobile devices. A small but significant price increase in mobile devices would
 19 not cause consumers to substitute either desktop, laptops, or consoles for their devices.

20 49. The geographic scope of the Licensable Mobile Operating System Market is
 21 worldwide, excluding China. The Licensable Mobile Operating System Market operates as
 22 described throughout this Complaint.

23 50. Google has a monopoly over licensable mobile OS platforms, both globally and in
 24 the United States, accounting for over 95% of licensable mobile OSs for mobile devices—
 25 smartphones and tablets—in both the United States and worldwide.

28 ² This market does not include any proprietary OS that is not available for licensing, such as
 29 Apple’s mobile OS, called iOS.

1 **B. The Android Application Distribution Market**

2 51. There is also a relevant market for the distribution of Android OS compatible apps
3 to mobile device users. This market is made up of all the channels by which Android OS compatible
4 apps on mobile devices are distributed to the hundreds of millions of mobile Android OS users. The
5 market primarily includes app downloads in Google's dominant Google Play Store, with smaller
6 stores, such as Samsung's Galaxy Store and Aptoide, trailing far behind. Nominally only, the direct
7 downloading of apps without using an app store (sometimes called "sideloading") is also part of
8 this market.

9 52. Notably, Google tries to deter sideloading through an array of technological hurdles,
10 including a complicated multi-step process requiring the user to make changes to the device's
11 default settings and manually granting various permissions, while encountering multiple,
12 unfounded security warnings that suggest sideloading is unsafe. In addition, as Google well
13 recognizes, most users are likely to simply acquire their applications through the application stores
14 that comes pre-loaded on their mobile devices. Therefore, while it is theoretically possible to obtain
15 apps through means other than an app store like the Google Play Store, the vast majority of users
16 utilize a pre-installed app store to purchase and download apps. Indeed, only 3% of active Android
17 devices have sideloaded an alternative Android app store. Users' ability to sideload does not
18 constrain Google's power because Google controls the underlying technology utilized for
19 sideloading.

20 53. App stores allow consumers to use their mobile device to browse, search for, access
21 reviews on, purchase (if necessary), download, and install mobile apps. It would be commercially
22 unreasonable for an OEM to sell a smart mobile device without an app store since the ability to
23 find, purchase, and download apps is one of the primary benefits of such devices.

24 54. App stores are OS-specific and only distribute apps compatible with a specific
25 mobile OS. An Android OS mobile device owner will use an Android-compatible app store that
26 distributes only Android-compatible apps. Consumers may not, for example, substitute Apple's
27 App Store because (1) Apple's App Store is not available for Android devices and (2) the Apple
28 App Store does not offer Android-compatible apps. Consequently, non-Android mobile app

1 distribution platforms—such as the Windows Mobile Store used on Microsoft’s Windows Mobile
 2 OS, the Apple App Store used on Apple iOS devices, and gaming stores for specific consoles like
 3 the Sony PlayStation and/or Nintendo Switch—are not part of the Android Application Distribution
 4 Market.

5 55. Even if an app is available on different OS platforms, only the version of that
 6 software compatible with a specific OS can run on a specific device, console, or computer.
 7 Accordingly, as a commercial reality, any app developer that wishes to distribute apps for Android
 8 mobile devices must develop an Android-specific version of the app that is distributed through the
 9 Android Application Distribution Market.

10 56. The geographic scope of the Android Application Distribution Market is worldwide,
 11 excluding China.

12 57. Alternatively, there exists a relevant, economically distinct antitrust product market
 13 for the distribution of mobile apps to users of all mobile devices, whether distributed on Android
 14 or Apple’s iOS (“Mobile App Distribution Market”). A hypothetical monopolist of the Mobile App
 15 Distribution Market could charge supra-competitive prices without losing significant business to
 16 alternative distribution channels. There are no meaningful substitutes because consumers expect
 17 that mobile devices will grant them access to a wide variety of apps.

18 58. Google has durable market power in the Mobile App Distribution Market. Its global
 19 market share, excluding China, accounts for approximately 53% of revenue and 84% of downloads.
 20 Google’s market power in this market is evidenced by, among other things, the absence of price
 21 competition and Google’s ability to control its suprareactive take rate on both the purchase of
 22 apps and all subsequent in-app purchases made through the Google Play Store. Google and Apple
 23 have each erected significant barriers to entry precluding meaningful entry by third-party app stores
 24 or direct download of apps.

25 C. The In-App Aftermarket

26 59. The In-App Aftermarket is a relevant antitrust aftermarket for distribution of and
 27 associated payment systems for digital accessories or enhancements to mobile applications.
 28

1 60. Once an application is downloaded, developers may offer various separate products
2 within the app. Those “in-app” products or enhancements can range from acquiring a sword or
3 adding clothes or different colors on the avatars in a game to subscribing to digital content such as
4 music or news to purchasing add free versions of apps.

5 61. Users cannot obtain this aftermarket digital content without developers being able
6 to distribute and to offer a means of paying for it. There are no reasonable substitutes for distribution
7 and payments systems for Android compatible aftermarket digital content. No small but significant
8 sustained price increase obviates the need for Android compatible aftermarket distribution and
9 payment.

10 62. There are multiple potential providers of In-App Aftermarket distribution and
11 payments systems that, absent Google’s aftermarket restrictions, could deliver and offer payment
12 for aftermarket Android-compatible digital content. These in-app transactions need not happen
13 through the Google Play Store nor be paid through Google Play Billing. Absent Google’s
14 restrictions, developers could distribute their aftermarket products to their customers directly, they
15 could create their own payment systems, or they could use some other store and third-party payment
16 system to effectuate the transaction.

17 63. The distribution of in-app products requires a payment system to efficiently transact
18 the purchase. Payment systems consist of software that performs the necessary steps to verify and
19 accept a customers’ purchase, as well as other associated functions, such as storage of user
20 information, invoicing, tracking payment history, and processing refunds. Payment systems are
21 separate products from application distribution stores, they can be offered separately and, in fact,
22 are widely demanded separately.

23 64. However, to enforce its requirement that all subsequent sales not only go through
24 Google, but are subject to Google’s anticompetitive toll in perpetuity, Google requires developers
25 to use its payments system, Google Play Billing, for all in-app purchases. Under normal competitive
26 conditions, developers could transact with their customers directly by creating their own payment
27 systems, or they could use payment systems provided by third parties. Such alternative payment
28

1 systems include competitors or potential competitors like PayPal, Stripe, Codashop, or proprietary
 2 payment system software written by app developers.

3 65. For a developer that desires to make sales of its application or in-app products, there
 4 are no substitutes for in-app payment systems that contain the software necessary to effectuate such
 5 transactions, including payment processing, data storage, and reporting services. Developers
 6 require the ability to offer efficient and seamless purchases within their applications. Without in-
 7 app payment systems, developers would not be able to sell as many products, as users might
 8 abandon the purchase or go elsewhere. Payment systems that require exiting the app to complete
 9 the transaction are not reasonable substitutes for developers or consumers. Thus, a provider of in-
 10 app payment systems can raise its price by a small but significant amount, and for a non-transitory
 11 period, without inducing developers to use other methods of transacting in-app sales.

12 66. Google is not constrained from exercising monopoly power in the In-App
 13 Aftermarket because Google has monopoly power in the Android Application Distribution Market,
 14 and therefore almost all developers have no commercially viable choice but to use the Google Play
 15 Store for the distribution of their applications and in-app products. Similarly, consumers are largely
 16 unaware of Google's anticompetitive restrictions, and, in any event, lack the necessary information
 17 to effectively determine the amount they will pay throughout the lifecycle of their applications and
 18 in-app purchases, and therefore do not constrain Google's anticompetitive tax.

19 67. The geographic scope of the In-App Aftermarket is worldwide, excluding China.
 20 The In-App Aftermarket operates as described throughout this Complaint.

21 **II. GOOGLE HAS MONOPOLY POWER IN THE MARKETS FOR LICENSABLE
 22 MOBILE OPERATING SYSTEMS AND IN THE ANDROID APPLICATION
 23 DISTRIBUTION MARKET**

24 A. **Google's Monopoly Power Over the Market for Licensable Mobile Operating
 25 Systems**

26 68. After Google acquired the Android OS in 2005, it advertised it as an "open-source"
 27 operating system. Indeed, Google routinely touted that the Android source code was "available for
 28 anyone to view, download, modify, enhance, and redistribute." It suggested that developers would
 have "an open and unobstructed environment to make their content available."

1 69. But, in fact, even at that time, Google knew that its commitment to “openness” was
 2 a fallacy. It intended to control every aspect of Android.

3 70. Google enjoys monopoly power in the Licensable Mobile Operating System Market
 4 through Android OS, which is the Google-certified version of Android.

5 71. The barriers to entry in the Licensable Mobile Operating System market are high.

6 72. A mobile ecosystem of products like apps and accessories typically develops around
 7 one or more mobile OSs, such as the Android OS. The “Android ecosystem” is, therefore, a system
 8 of products for mobile devices that are inter-dependent and compatible with each other.

9 73. OEMs design mobile devices to ensure compatibility with whatever OS was selected
 10 for that device. For OEMs, the process of implementing a mobile-device OS requires significant
 11 time and investment. Thus, switching to another mobile-device OS is difficult, expensive and time-
 12 consuming. OEMs that developed their devices around the Android OS would face substantial costs
 13 to switch to another OS, a reality that furthers Google’s monopoly power in the Licensable Mobile
 14 Operating System Market.

15 74. Cementing its dominance and creating barriers to entry, Google has long restricted
 16 OEMs from developing or distributing their own version of Android. But for this restriction, anyone
 17 could access the Android source code and create a modified OS, known as a fork. Yet, as a pre-
 18 condition to receiving a license to distribute Google apps and APIs—the set of technical
 19 specifications that enable software applications to communicate with each other, OSs, and
 20 hardware, Google requires OEMS to enter into anti-forking agreements—Anti-Fragmentation
 21 Agreements or Android Compatibility Commitments—that forbid them to (1) develop or distribute
 22 their own versions of Android, or (2) do anything that may cause or result in the fragmentation of
 23 Android. . These anti-forking agreements allow Google to maintain its stranglehold over licensable
 24 OSs for mobile devices, and, therefore, the Android Application Distribution Market.³

25
 26 ³ The European Commission found the anti-forking requirements to be an abuse of a dominant position,
 27 thwarting even potential competitors such as Amazon from succeeding in the mobile operating system
 28 market. See “Antitrust: Commissions fines Google €4.34 billion for illegal practices regarding Android
http://europa.eu/rapid/press-release_IP-18-4581_en.htm.

1 75. Moreover, and as evidence of its market power over OEMs, Google uses the
 2 Android OS to restrict which apps and app stores OEMs pre-install on their devices and to deter the
 3 direct distribution of competing app stores and apps to Android users, all at the expense of
 4 competition in the Android ecosystem.

5 76. OEMs have no commercially viable choice but to license Google's Android OS,
 6 and, in turn, developers must create apps that are compatible with that OS. OEMs such as ZTE and
 7 Nokia have acknowledged that other non-proprietary OSs are poor substitutes for and not a
 8 reasonable alternative to the Android OS; other mobile OSs do not presently support many high-
 9 quality and successful apps deemed essential or valuable by consumers. Google, therefore, has
 10 constructed a market that biases consumers against devices with non-proprietary mobile-device OSs
 11 other than the Android OS, while putting OEMs at Google's mercy because their devices must offer
 12 a popular mobile-device OS and corresponding ecosystem to consumers.

13 77. To attract app developers and users, Google has falsely represented that Android is
 14 an "open" ecosystem where any participant may create Android-compatible products without
 15 unnecessary restrictions. Indeed, when Google in 2008 launched the Android Marketplace, which
 16 was the predecessor to the Google Play Store, Google noted in an Android blog post, "We chose
 17 the term 'market' rather than 'store' because we feel that developers should have an open and
 18 unobstructed environment to make their content available." But, in fact, Google has used the
 19 Android OS to keep its ecosystem closed to competition.

20 78. As the dominant mobile-device OS licensor, Google recognizes that participation
 21 on its platform is a "must-have" market for developers. Google only unlocks the door to its
 22 ecosystem for participants willing to play by Google's rules and anticompetitive restrictions.

23 **B. Google's Monopoly Power in the Android Application Distribution Market**

24 79. Google also has monopoly power in the Android Application Distribution Market
 25 through the Google Play Store.

26 80. Other existing Android mobile app stores cannot thwart Google's monopoly power
 27 in the Android Application Distribution Market because no other app store reaches nearly as many
 28 Android users as the Google Play Store, and Google's anticompetitive conduct has kept it that way.

1 No other Android app store comes close to the number of pre-installed users that Google has.
2 Setting aside app stores designed by a particular OEM for installation in the mobile device sold by
3 that OEM (for example, Samsung’s Galaxy Store and the LG Electronics App Store), no other
4 Android app store, except the Google Play Store, is pre-installed on more than 10% of Android
5 mobile devices, and many have no appreciable market penetration at all. Aptoide, for example, is
6 an Android app store that claims to be the largest “independent” app store outside China, but it
7 comes pre-installed on no more than 5% of Android mobile devices.

8 81. Because there is no economically viable substitute to the Google Play Store for
9 distribution of Android apps, Google has a monopoly over the Android Application Distribution
10 Market.

11 82. Google’s monopoly power is demonstrated by its massive market share in terms of
12 apps downloaded. The Google Play Store offers over three million apps, including all the most
13 popular Android apps, compared to just 700,000 apps offered by Aptoide, the Android app store
14 with the next largest listing. Google’s share of the market can also be inferred through the
15 percentage of devices sold with the Google Play Store preinstalled, which is nearly all Android OS
16 devices sold by the major OEMs. In short, Google’s share of the market – however measured – well
17 exceeds that of any actual or potential competitor.

18 83. The Google Play Store benefits from the large number of participating app
19 developers and users. The ever-growing variety of apps attracts more and more users, and, in turn,
20 the audience attracts app developers who wish to access those users. The system feeds itself.
21 Consequently, because of Google’s restrictions described herein, OEMs of Android OS mobile
22 devices have no other commercially viable option than to make and sell smartphones or tablets with
23 Google Play Store.

24 84. As further proof of its monopoly power, Google imposes a supra-competitive
25 commission of up to 30% on the price of apps purchased through the Google Play Store and in-app
26 purchases processed through Google Play Billing, the use of which is mandated by Google’s
27 restrictions on app developers whose apps are distributed through the Google Play Store.
28

1 85. This is a far higher commission than would exist under competitive conditions, as
2 demonstrated, for example, by Microsoft’s recent announcement that it will decrease the Microsoft
3 Store’s commission for PC games from its current range of 15%-30% to 12% beginning August 1,
4 2021. This, Microsoft explained, “means developers can bring more games to more players and
5 find greater commercial success from doing so.” Other platforms, too, charge less for distribution
6 than does the Google Play Store. Epic Games, Inc. (“Epic”), for example, charges 12% for
7 transactions on the Epic Games Store.

8 86. Google’s market power results in enormous profits. In 2020 alone, the Google Play
9 Store generated revenues of \$38 billion, accounting for over 20 percent of the company’s total
10 revenue in that year of \$182 billion.

11 87. No other application delivery store constrains Google’s power. Though some
12 devices, such as Samsung’s Galaxy devices, carry stores other than the Google Play Store, those
13 stores do not serve as a significant constraint on Google’s ability to raise prices or exclude
14 competition. The Samsung Galaxy Store, for instance, is only on Samsung devices, and not on any
15 non-Samsung devices. No developer, therefore, can reach nearly 100% of Android devices through
16 the Galaxy Store, as they do with Google’s Play Store. Nor does the Galaxy Store have near the
17 breadth of applications available in the Google Play Store. In addition, Google prevents the Galaxy
18 Store from exclusively distributing even a handful of the largest and most important apps—
19 something that Google viewed as necessary for Samsung to gain enough momentum to become
20 successful. Thus, the Galaxy Store does not serve as a true competitive alternative capable of
21 constraining Google’s monopoly power.

22 88. Google has long recognized the need to keep any potential competitors at bay,
23 maintaining its iron grip on its market power. For instance, long concerned about Samsung’s ability
24 to pre-install competing app stores, including Samsung’s own Galaxy Store, Google has repeatedly
25 pursued additional methods to reinforce the stringent Mobile Application and Distribution
26 (“MADA”) restrictions that it imposes on OEMs, detailed below. As far back as 2016, it sought to
27 mitigate its “serious concerns about the proliferation of pre-installed apps,” such as “FB and AMZN
28 apps” on certain Samsung devices. It even tried to enter “a deal to add features to the Play Store

1 that would highlight differentiated features and apps for Samsung devices, *in exchange for the*
 2 *closing of the Galaxy apps store.*" (emphasis added).

3 89. More recently, faced with the prospect that Samsung's Galaxy Store might distribute
 4 important applications, Google devised a scheme to effectively pay off Samsung, splitting some of
 5 its monopoly profits to discourage Samsung from becoming a full-blown competitor. To avoid the
 6 "[w]orst case scenario" of a competing "Samsung's Ecosystem," Google decided to offer Samsung
 7 a deal arising from a secret initiative that it code-named "Project Banyan." Project Banyan was
 8 conceived by Google in early 2019 to "mitigate risks related to Samsung's pursuit of a more
 9 lucrative app store." The risk was, in fact, sizable. Google assessed that Samsung's Galaxy Store
 10 represented a potential \$3.2 billion annual revenue risk by 2022, which equated to a "[l]oss [of]
 11 13% / 35% of revenue on Samsung devices." Google decided that while it probably could not get
 12 Samsung to "jettison the Galaxy Store" completely, it could propose that Samsung remove from its
 13 store all co-listed game and app titles, leaving the Galaxy Store populated only with "exclusive"
 14 titles. In short, Google would hobble Galaxy as a potential competitor.

15 90. The plan specifically called for Google to co-opt the Galaxy Store through
 16 technology. Google anticipated that for Samsung's exclusive titles, it could implement a backend
 17 process known internally as "Ally-Oop." This process would allow Samsung's exclusive apps to
 18 continue to be hosted on Samsung's Galaxy Store, but "served" by Google Play Billing. In essence,
 19 the Galaxy Store would exist in name only. If implemented, Google's plan to "jettison the Galaxy
 20 Store" would then have largely succeeded. The back end would be powered by Google, allowing
 21 Google to maintain its stranglehold on the monopoly profits that it continues to reap, year after year.
 22 And, critically, Google would continue to control the holy grail: capturing the revenue from in-app
 23 purchases.

24 91. In return for Samsung agreeing to Google's Project Banyan business plan, Google
 25 was willing to offer Samsung, among other things, [REDACTED], as well as [REDACTED]

26 [REDACTED]

27 [REDACTED]

28

1 92. Despite distribution on Galaxy phones, the Galaxy Store far trails the Google Play
 2 Store, which is given the predominate position on those Samsung phones. In 2019, for instance,
 3 Google estimated that Samsung made around \$0.1B in revenue on its Galaxy Store, while Google
 4 made around \$4B in sales through the Google Play Store on Samsung phones. The Galaxy Store
 5 does not constrain Google’s abuse of its power, and Google’s internal plans show that Google
 6 intends to keep it that way.

7 93. Google did not stop there, however. Dissatisfied with maintaining its power through
 8 restrictive OEM agreements alone, Google has devised—and implemented—a plan to pay off the
 9 largest developers who threatened to defect from the Google Play Store. While the vast majority of
 10 developers have no such choice, some of the largest developers were fed up with Google’s
 11 extraordinary toll and agitated for change. Fearing that these developers could ultimately establish
 12 a new, competitive app distribution channel, either by supporting another app store or creating one
 13 themselves, Google sprang into action. It offered “incentives” for those developers who posed the
 14 largest risk of increasing competition in app distribution. Those incentives have ensured not only
 15 continued distribution through the Google Play Store, but the agreements foreclosed the ability of
 16 any app store other than Google’s to exclusively distribute these important applications.

17 94. In a competitive world, Google would have to lower its toll for *all* developers.
 18 Because it lacks competition, however, Google can set its toll, discriminating in favor of some
 19 developers—as only a firm with market power can do.

20 95. Though Google might not yet have succeeded in eliminating once and for all the risk
 21 of every single potential competitor, including Samsung’s Galaxy store, the web of anticompetitive
 22 restrictions that it has inked and the financial inducements that it has provided over the years to the
 23 largest and most viable potential alternative distribution channels, discussed below, has more than
 24 substantially foreclosed competition from rival app stores by anticompetitively raising their costs
 25 to compete, while eliminating most incentives to doing so.

26 96. Google’s monopoly power in app distribution is not constrained by competition at
 27 the smart mobile-device level either, and therefore, is not limited by Apple or its iOS.
 28

1 97. First, consumers are deterred from leaving the Android ecosystem due to the
 2 difficulty and costs of switching. Consumers choose a smartphone or tablet based in part on the pre-
 3 installed OS and its ecosystem. Once a consumer selects a smartphone or tablet, the consumer
 4 cannot replace the pre-installed mobile OS with an alternative. If they want to switch OSs, the
 5 consumer must purchase a new mobile device. In addition, mobile OSs have different designs,
 6 controls, and functions that consumers learn to navigate over time. The cost of learning to use a
 7 different mobile OS is part of consumers' switching costs.

8 98. Second, switching from Android devices may result in a significant loss of personal
 9 and financial investment that consumers put into the Android ecosystem. Because apps, in-app
 10 content, and many other products are designed for or are only compatible with a particular mobile
 11 OS, switching to a new mobile OS may mean losing access to such products or data, even if such
 12 apps and products are available within the new ecosystem. Of particular concern to many consumers
 13 is the risk of losing access to items of personal or sentimental significance—such as photographs
 14 or videos of loved ones—that might prove irreplaceable if lost when switching devices. Consumers
 15 switching from the Android OS would, consequently, lose their investment in the Android-specific
 16 apps previously purchased or used.

17 99. Consumers are also unable to determine the "lifecycle price" of devices—*i.e.*, to
 18 accurately assess at the point of purchase how much they will ultimately spend (including on the
 19 device and all apps and in-app purchases) for the duration of their device ownership. Consumers
 20 cannot predict all the apps or in-app content they may eventually purchase. Because they cannot
 21 know or predict all such factors when purchasing mobile devices, consumers are unable to calculate
 22 lifecycle prices for the devices. This prevents consumers from effectively taking Google's
 23 anticompetitive conduct into account when making mobile device purchasing decisions.

24 100. Given consumers' essentially unavoidable "lock-in" to the Android OS, developers
 25 must participate in the Android ecosystem. The alternative is losing access to millions of Android
 26 users. Google's monopoly power remains unchallenged and durable.

1 **III. GOOGLE UNLAWFULLY MAINTAINS A MONOPOLY IN THE ANDROID
2 APPLICATION DISTRIBUTION MARKET**

3 101. Mobile apps make mobile devices more useful and valuable because they add user-
4 specific functionality like working, video chatting, banking, shopping, job hunting, photo editing,
5 reading digital news sources, editing documents, or playing a game like Hearthstone, Fortnite, or
6 Pok  mon Go. Many consumers own only a mobile device and, even if they could perform the same
7 or similar functions on a personal computer, the ability to access apps “on the go” using a handheld,
portable device remains valuable and important.

8 102. Consequently, mobile devices must provide an avenue for downloading. On
9 Android devices, this is primarily done through the Google Play Store. Through this store, mobile
10 apps can be browsed, purchased (if necessary), and downloaded by a consumer. App stores such as
11 Google Play Store, alongside other limited distribution platforms available to the hundreds of
12 millions of Android-based mobile device users, comprise the Android Application Distribution
13 Market.

14 A. **Google’s Anticompetitive Agreements Imposed on OEMs and Mobile Network
15 Operators Foreclose Competitors in the Android Application Distribution
Market**

16 103. Through various anticompetitive acts and unlawful restraints on competition,
17 Google maintains a monopoly in the Android Application Distribution Market, causing ongoing
18 harm to competition and to app developers and consumers. Google’s restraints of trade undermine
19 its representations that, “as an open platform, Android is about choice,” and that app developers
20 “can distribute [their] Android apps to users in any way [they] want, using any distribution approach
21 or combination of approaches that meets [their] needs,” including by allowing users to directly
22 download apps “from a website” or even by “emailing them directly to consumers.”

23 104. Indeed, senior Google executives have echoed the importance of Google’s openness
24 in mobile devices. For example, a Senior Vice President at Google explained Google’s “open”
25 philosophy as follows: “In an open system, a competitive advantage doesn’t derive from locking in
26 customers, but rather from understanding the fast-moving system better than anyone else and using
27 that knowledge to generate better, more innovative products.” Accordingly, the openness “allow[s]

1 innovation at all levels—from the operating system to the application layer—not just at the top” to
 2 facilitate “freedom of choice for consumers” and a “competitive ecosystem.”

3 105. Similarly, in 2011, Google’s then Senior Vice President of Mobile falsely
 4 represented that “device makers are free to modify Android to customize any range of features for
 5 Android devices” except for some basic compatibility requirements.

6 106. Moreover, then Chairman of Google, Eric Schmidt, was asked at a 2011 Senate
 7 hearing about competition in online search about whether Google has demanded that OEMs make
 8 Google the default search engine as a condition of using the Android OS. In response, Schmidt
 9 noted that Google did not make such a demand and that “[o]ne of the greatest benefits of Android
 10 is that it fosters competition at every level of the mobile market—including among application
 11 developers. Google respects the freedom of manufacturers to choose which applications should be
 12 pre-loaded on Android devices. Google does not condition access to or use of Android on pre-
 13 installation of any Google application or on making Google the default search engine”

14 107. Even today, the Google owned and operated Android Open Source Project website
 15 emphasizes that: “Google started the Android project in response to our own experiences launching
 16 mobile apps. We wanted to make sure there would always be an open platform available for carriers,
 17 OEMs, and developers to use to make their innovative ideas a reality. We also wanted to avoid any
 18 central point of failure, ***so no single industry player could restrict or control the innovations of
 19 any other.***” (emphasis added).

20 108. These representations, which include statements by some of the most senior Google
 21 executives, were misleading or false.

22 109. Google’s internal documents reveal a reality far different from the tale Google told
 23 in its public statements. Far from “foster[ing] competition at every level of the mobile market,” in
 24 2009, Google told a major OEM that it believed a “single ‘app store’” was an essential piece of the
 25 Android ecosystem, and that it was working to make the then Play Store, Android Market, “that
 26 single *open* distribution system.” (internal quotes in original).

27 110. A more recent internal planning memorandum reinforces Google’s view of the
 28 Android ecosystem as a driver of Google’s interests rather than Google’s commitment to fostering

1 an open Android ecosystem. According to Google, Android “need[s] to fully embrace its role as the
 2 enabler of Google’s apps and products, first and foremost (less emphasis on ‘neutral, open-source’
 3 role to the rest of the world, more on serving Google products).”

4 111. As described below, Google has willfully and unlawfully maintained its monopoly
 5 in the Android Application Distribution Market through a series of related anticompetitive acts
 6 designed to foreclose alternative and competing Android app distribution channels.

7 i. ***Anticompetitive MADA Restrictions Requiring OEMs to Preload and***
 8 ***Preference Google Play and Preventing OEMs from Pre-Loading Any***
Software Google Deems to “Interfere” with Android.

9 112. First, Google imposes anticompetitive restrictions on OEMs. Google conditions
 10 licensing of Google Play Store, other essential Google services, and the Android OS and trademark
 11 on an OEM’s agreement to give the Google Play Store preferential treatment. Google requires pre-
 12 installation and prominent placement for the Google Play Store.

13 113. Specifically, Android OEMs (which, as noted above, comprise virtually all OEMs
 14 that obtain an OS in the licensable market) must sign a Mobile Application Distribution Agreement
 15 with Google. A MADA confers a license to a bundle of proprietary Google apps (such as Google
 16 Play, Google Chrome, Gmail, Google Search, Google Maps, and YouTube), Google-supplied
 17 services necessary for mobile app functionality (“Google Play Services”), and the Android
 18 trademark. The MADA *requires* OEMs to locate Google Play Store on the “home screen” of each
 19 mobile device. Android OEMs must further pre-install up to 30 mandatory Google apps and locate
 20 these apps on the home screen or on the next screen, occupying valuable space on each user’s
 21 mobile device that otherwise could be occupied by competing app stores or other services. And if
 22 an OEM wishes to make any of the Google apps deletable by the user, the proportion of Google
 23 apps that are made deletable may not exceed the corresponding proportion of non-Google deletable
 24 preloads.

25 114. Google has maintained and enforced its restrictions even in the face of OEM desire
 26 for flexibility. When Samsung made the “aggressive” ask to determine which of the GMS apps that
 27 it had to preinstall, to make certain pre-loaded apps deletable, and to revisit Google’s placement
 28

1 requirements for the Play Store, Google was able to hold the line. It successfully maintained the
 2 “MADA requirements,” including the default home-screen placement of the Google Play Store.

3 115. These requirements ensure that the Google Play Store is the most visible app store
 4 any user encounters and, therefore the app store that most consumers will simply use by default. As
 5 Google has noted in questioning whether users and developers would really choose Google Play,
 6 given a choice, “if we were honest we would admit that most users and developers aren’t
 7 consciously ‘choosing’ they are going with the default.”

8 116. Google’s restrictions purposely place all other app stores at a significant
 9 disadvantage. Prominent placement is critical to an app store’s success and adoption, but Google
 10 effectively forecloses such placement through a web of agreements with OEMs, including, but not
 11 limited to the MADA agreements. Google’s internal documents show it has long understood the
 12 power of default placement.

13 117. Google’s OEM restraints prevent or disincentivize competing app stores from vying
 14 for prominent placement on Android devices, which decreases their exposure to consumers and, as
 15 a result, harms their ability to attract app developers to their store. Absent Google’s restrictions, an
 16 app distributor could negotiate with OEMs to provide their app stores the most prominent
 17 placement, something that Google currently forbids. Google’s contracts, covering over 95% of
 18 mobile devices using a licensable OS globally, therefore substantially foreclose competition by
 19 relegating would-be competitors to much less visible locations, or even the bottom of the pile.
 20 Google prohibits any OEM that licenses the Android OS—which is the overwhelming majority of
 21 OEMs—from installing *and* featuring any rival app distribution platform more prominently than
 22 the Google Play Store.

23 118. Second, Google interferes with OEMs’ ability to license, distribute, and prominently
 24 display competing Android app stores by forcing any OEM who wishes to license even *one* of the
 25 applications included in Google’s arbitrarily designated Google Mobile Services (GMS)—a suite
 26 of applications including Google Search, Google Chrome, Gmail, YouTube, Google Maps, and the
 27 Google Play Store—to enter a MADA that requires that OEM to license and prominently display
 28 *every* GMS application. Accordingly, if an OEM only wants to pre-install Google Chrome, it cannot

1 do so without pre-installing *all* applications in GMS. The limited real estate on a mobile device
 2 screen and the requirement that the GMS apps be displayed prominently makes it impractical for
 3 competing third-party app stores to gain equally prominent placement.

4 119. When faced with the prospect of competition, Google has tightened its MADA
 5 restrictions. For instance, in 2014, even though it recognized that “android storefronts [other than
 6 Play] are relatively small,” Google recognized that social apps—like messaging apps—had begun
 7 to facilitate the download and installation of third-party apps and app stores. Indeed, Kakao, a
 8 Korean messaging app, was operating at that time with the philosophy that “Communication
 9 shouldn’t just be limited to emoticons, images, and text. Third-party developers could be part of
 10 Kakao’s platform.”

11 120. To Google, the “implication” of a messaging app or social networking site that
 12 allowed app developers to interact with users was that Google would have less control over its
 13 ecosystem. Specifically, Google would have a reduced “ability to influence” how developers
 14 engage with its ecosystem “which underpins a lot of what we want to do with Android.” Google’s
 15 response was “Project Gabby,” which sought to “create barriers to entry” that impede developers’
 16 “movement to fulfillment level”; “We don’t just stop them – we get them to retreat.”

17 121. To head off potential competition from storefronts other than the Google Play Store,
 18 Google discussed a multiprong strategy whereby it (1) “Reduced their addressable market” by
 19 having more devices with Google-managed builds (e.g. Android One, Nexus); (2) used “Corporate
 20 development / M&A” to “purchase a competitor |invest in underdog”; (3) used “Carrier/OEM
 21 deals” that “incentivize for pre-load exclusivity” and “gain exclusivity on payment types”; and (4)
 22 would “Change policy and revise contracts” to “change GMS to alter app-preloading terms.”

23 122. Google also noted its MADAs lacked any provision “blocking the pre-loading of
 24 apps that can distribute applications themselves.” So, Google updated its DDA and altered Section
 25 4.5 as follows: “You may not use Google Play to distribute or make available any Product that has
 26 a purpose that facilitates the distribution of software applications and games for use on Android
 27 devices outside of Google Play.” The “[t]ake-away: Any app that distributes apps themselves must
 28

1 be preloaded or distributed via alternative means, like direct download, or download facilitated by
2 a 3rd party app.”

3 123. At the same time, worried about the Amazon store “getting a foothold in Android
4 world,” Google’s updated MADA 2.0 terms also required “tighter placement requirements.”
5 Specifically, the Google Play Store now had to appear on the *very first* home screen.

6 124. Broadly drafted provisions of the MADAs give Google significant control of the
7 choice of applications that an OEM preloads or installs on a device. For instance, an OEM may not
8 install any application that could “interfere with an End User’s expected operation and use” of the
9 device or that “circumvents and/or interferes with the expected configuration, placement, operation
10 and/or use” of the Google apps on the device.

11 125. Google has used these provisions to block the pre-installation of potential
12 competitors. For instance, when Epic Games attempted to gain preinstallation on OnePlus, an
13 Android OEM, it was notified that Google was “preventing the preload of the Epic Games app with
14 install package permissions,” and that Google was “particularly concerned that the Epic Games app
15 would have the ability to potentially install and update multiple games with a silent install bypassing
16 the Google Play Store.”

17 126. Google also conditions the distribution of Google’s version of Android, including
18 the GMS suite, on the entry of separate anti-forking or, more recently, “compatibility” agreements.
19 Google prohibits OEMs from modifying the Android source code, which prevents OEMs from
20 making changes to Android OS that would facilitate preloaded or side-loaded app stores and
21 eliminate certain of the technical hurdles for competing app stores.

22 127. The anti-forking agreements have prohibited OEMs from developing other phones
23 and software based on modified Android code even if those phones and software do not contain
24 any Google apps or products. The AFAs dictate that OEMs may only (a) market, distribute,
25 manufacture, or promote devices based on Android that comply with Google’s Android
26 compatibility requirements; and (b) market, distribute, or promote Android-based software (other
27 than end-user apps) that is designed to run on devices that comply with Google’s Android
28 compatibility requirements. Further, because of Google’s AFAs, OEMs cannot modify Android to

1 allow for frictionless downloading of apps outside of the Google Play Store, further foreclosing the
 2 App Distribution Market to competitors. This is the case even with Google’s new form of
 3 agreement, called the Android Compatibility Commitment (“ACC”). The ACC merely allows
 4 OEMs to manufacture non-Android Compatible Devices under a third-party label, but it still
 5 prohibits an OEM from marketing under its own brand devices with operating systems that would
 6 more easily allow side-loaded application or critical features like auto-updating.

7 128. OEMs must agree and have agreed to Google’s anticompetitive, restrictive terms
 8 and conditions or risk losing access to the Android OS and Google Play Services, including the
 9 APIs that many mobile-app developers need for their apps to work properly. Without Google Play
 10 Services, apps cannot provide critical functionality such as “push notifications,” or location
 11 detection.

12 129. Just as with Google’s claims of “openness,” its representation, through its then Chair
 13 Eric Schmidt during a 2011 Senate hearing, that Android “fosters competition at every level of the
 14 mobile market,” and that “Google respects the freedom of manufacturers to choose which
 15 applications should be pre-loaded on Android devices,” were false.

16 130. The totality of Google’s conduct aimed at preventing distribution through one of the
 17 most effective means available—preinstallation on devices—has substantially foreclosed
 18 competition, allowing Google to maintain its monopoly.

19 *ii. Revenue Sharing Agreements with Mobile Network Carriers and OEMs.*

20 131. Google has long excluded, discouraged, or disincentivized competition through
 21 revenue sharing agreements with potential competitors and new entrants alike. In short, these
 22 agreements seek to pay off OEMs and mobile network operators over time to ensure the Google
 23 Play Store’s prominence—and even exclusivity.

24 132. For instance, as early as 2009, Google understood that mobile network operators
 25 “control[led] content distribution and access to end users” and that the mobile network operators
 26 would not be “willing to give up the revenue stream on content distribution.” Google anticipated
 27 that mobile network operators would “block Market if we don’t share revenue and/or continue with
 28 siloed app stores.” Google’s “Android Market Strategy” was therefore designed to “[p]rovide

1 incentive[s] for operators to distribute Android market”, which would “offset [the] opportunity
 2 cost” of creating or distributing a competing app store.

3 133. Indeed, Google has long had a “Strategic Marketing Agreement” with [REDACTED], one
 4 of the three largest mobile network operators in the United States, which requires that “Google
 5 Applications,” including the Google Play Store, must be preloaded in a prominent position (no more
 6 than one menu below the Default Home Screen or in the Application Tray) on all Android mobile
 7 devices that [REDACTED] distributes. In return, Google has agreed to pay [REDACTED] a share of its
 8 advertising revenues.

9 134. The importance of preloading and prominently displaying certain applications
 10 cannot be overstated. According to Google, requiring mobile network operators who distribute
 11 mobile devices to commit that there be “no duplication of services” for GMSA apps “is the same
 12 as exclusivity as long as it applies across *all* . . . Android devices[] . . . Our philosophy is that we
 13 are paying revenue share *in return for* exclusivity.”

14 135. Unsurprisingly, Google has entered into similar agreements with other major mobile
 15 network operators. These agreements virtually ensure *de facto* Google Play exclusivity on devices
 16 distributed by those mobile network operators. As a senior Google executive candidly explained by
 17 in a 2014 presentation, “We cut carriers in to disincentivize building their own stores and
 18 fragmenting the ecosystem.”

19 136. Like with mobile network operators, the idea of cutting OEMs into some of
 20 Google’s monopoly profits in return for promises not to compete (or promote competition) has
 21 similarly been relied upon by Google for many years. Indeed, Google has long recognized that
 22 while it cannot completely “stop OEMs preloading due to anti-competitive concerns,” through the
 23 MADAs, it can make it even less likely that OEMs would do so through “rev share deals.”

24 137. Weaving the “tighter [MADA] placement requirements story into the revenue share
 25 angle” with major OEMs was Google’s attempt to avoid antitrust scrutiny. As a high-level Google
 26 executive noted: “let’s discuss in the car... long story short: putting everything in the MADA is an
 27 impossibility.”

28

1 138. Thus, when faced with potential competition from the likes of Microsoft and
 2 Amazon, Google noted in an internal strategy document that it would respond by offering up to
 3 16% of “Play rev share to OEMs,” spending up to \$222M by 2023, in addition to what it called the
 4 “bonus tier” of revenue share agreements to secure “Play exclusivity.”

5 139. Google later renamed the “bonus tier” the “Premier Device Program.” Like all other
 6 Google contracts, the Premier Device Program Revenue Share Agreement does not transparently
 7 call it “exclusivity” but instead *de facto* requires exclusivity by its terms. The new agreements
 8 condition payment of ad ***and*** Play revenue share on the OEM’s agreement to not allow any “non-
 9 End User-initiated download or update” of “any Alternative Play Service”, “as determined by
 10 Google in its sole discretion.” So, in effect, to qualify for the additional revenue share, Premier
 11 Device Program results in exclusivity, as participants cannot contract to preinstall (or otherwise
 12 direct users to download) any third-party app store.

13 140. Discovery is ongoing. Though Google’s internal documents show that over 200
 14 million new devices have been covered by these exclusive agreements, and that they have
 15 successfully eliminated the “risk of app developer contagion,” it remains to be seen exactly how
 16 many OEMs have entered Google’s Premier Device Program. Google’s intent, however, is clear:
 17 securing exclusivity for the Google Play Store and foreclosing competition from alternative
 18 application distribution platforms.

19 141. Google therefore does not need to mandate exclusivity in its various OEM and
 20 mobile network operator agreements. As candidly described by a Google employee: “OEM
 21 preinstall default under MADA + carrier revshare incentive with non-duplication + volume targets
 22 [search deals] = many hurdles for a carrier seeking to change the default. They’d need >\$ from the
 23 alternative search AND EITHER persuade the OEM to seek (and get from us) an exception to their
 24 MADA to allow preinstallation of another search provider with preinstall of other GMS, OR ship a
 25 device with no GMS preinstalled at all [MADA requirements]. In practice, shipping without all
 26 GMS doesn’t happen except in edge cases.”

27
 28

1 142. And the cost for doing so is not cheap; Google expects that it will pay more than
 2 \$4.5 billion per year by 2023 “across Search and Play for carriers and non-Samsung OEMs to secure
 3 play platform protections for Search, and Play and critical apps protections on more devices.”

4 143. Though competition in the Android Application Distribution Market is substantially
 5 foreclosed *without* these agreements, Google’s plans to coerce and buy off potential distribution
 6 avenues have no end. These additional agreements are—and will continue to be—icing on the cake.

7 **B. Google’s Anticompetitive Agreements Imposed on Developers Foreclosing
 8 Competition in the Android Application Distribution Market**

9 144. Google also imposes anticompetitive constraints on app developers by restricting
 10 their ability to provide competing mobile app stores within an app or to inform consumers of
 11 alternative channels of distributions within the app. This has further entrenched Google’s monopoly
 12 in the Android Application Distribution Market.

13 145. First, Google prevents developers who go through the Google Play Store from
 14 providing an app that would allow for the downloading of competitive application distribution
 15 stores within that app. In other words, Google prevents the distribution of a competing mobile
 16 storefront for other app purchases even though Google has no legitimate procompetitive
 17 justification for preventing application developers from distributing alternative application delivery
 18 stores.

19 146. Google imposes this restraint through provisions of the Google Play Developer
 20 Distribution Agreement (“DDA”), which all app developers must sign before they can distribute
 21 their apps through the Google Play Store.

22 147. Section 4.5 of the DDA provides that developers “may not use Google Play to
 23 distribute or make available any Product that has a purpose that facilitates the distribution of
 24 software applications and games for use on Android devices outside of Google Play.” Google
 25 interprets this provision broadly to not only include traditional app stores but also links to other
 26 locations where an app may be “launched” or otherwise accessed. Google has used Section 4.5 to
 27 stymie competition from Amazon and others alike.

1 148. In 2014, Amazon attempted to use its Amazon App, which users downloaded from
2 the Google Play Store, to allow users to download Amazon apps outside of the Google Play Store.
3 Google told Amazon that it was in violation of the DDA and eventually, Google forced Amazon to
4 remove the Amazon App from the Google Play Store and replace it with the Amazon Shopping app
5 which disabled this functionality. This ensured that an Amazon app store was only available via
6 sideloading. And then, as discussed in further detail below, Google deliberately made this
7 sideloading process cumbersome in order to keep potential competition from Amazon and others
8 suppressed.

9 149. Section 4.9 of the DDA further limits the ability of developers to steer their users to
10 alternative stores. Once a developer acquires user information through Google Play, that developer
11 is barred from using that information for any communications that would lead to selling or
12 distributing products outside of Google Play. This gag rule prevents developers from telling their
13 customers – directly through their apps – about potential alternative channels for purchasing or
14 transacting upgrades or enhancements to the application, let alone new applications that the
15 developers may want to sell to the users directly or through some alternative app store.

16 150. The DDA in Section 8.3 further reserves to Google the right to remove and disable
17 any Android app that it determines violates its various restrictions imposed through the DDA.

18 151. The DDA is non-negotiable, so developers seeking access to Android users through
19 the Google Play Store must accept Google's standardized contract of adhesion. Through the various
20 restraints imposed through the DDA, Google has exercised its monopoly power by blocking
21 applications that may turn into competitive threats.

22 152. In the absence of these unlawful restraints, app developers could direct users to
23 competing app distributors, including those offering lower prices and that may be curated to specific
24 consumers' interests—*e.g.*, an app store that specializes in games. Without Google's unlawful
25 restraints, app developers could give users an opportunity to use other app stores providing
26 additional platforms on which more apps could be featured, and thereby, discovered by consumers.

27 153. Second, Google conditions app developers' ability to effectively advertise their apps
28 to Android users on being listed in the Google Play Store. Specifically, Google markets an App

1 Campaigns program that, as Google says, allows app developers to “get your app into the hands of
2 more paying users” by “streamlin[ing] the process for you, making it easy to promote your apps
3 across Google’s largest properties.” This includes certain ad placements on Google Search,
4 YouTube, Discover on Google Search, and the Google Display Network, and with Google’s “search
5 partners,” which are specially optimized for the advertising of mobile apps. However, to access the
6 App Campaigns program, Google requires that Android app developers list their app in the Google
7 Play Store. This conduct further entrenches Google’s monopoly in the Android Application
8 Distribution Market by coercing Android app developers to list their apps in the Google Play Store
9 or risk losing access to a great many Android users they could otherwise advertise to, including
10 through Google’s search engine, but for Google’s restrictions.

11 154. But for Google’s anticompetitive acts, Android users could freely download apps,
12 without the technological and practical hurdles placed by Google, from developers’ websites, rather
13 than through an app store, just as they might do on a personal computer. There is no reason that
14 downloading and installing an app, or making in-app purchases, on a mobile device should be
15 different. Millions of personal computer users easily and safely download and install software
16 directly every day, such as Google’s own Chrome browser or Adobe’s Acrobat Reader.

C. Google's Imposition of Unnecessary Technical Barriers Further Foreclosing Competition in the Android Application Distribution Market

155. Google does not stop at anticompetitive contractual arrangements with OEMs and
19 developers. Google goes a step further and erects unnecessary pretextual technical barriers to
20 interfere with the distribution of Android app stores and apps, and consequently, in-app purchases,
21 directly to users outside of the Google Play Store, and to restrict a user's ability to update any apps
22 that the user may install after successfully navigating Google's technical barriers.

24 156. First, Google restricts, and in some cases, eliminates, a consumer’s ability to directly
25 download apps and competing app stores. Direct downloading is entirely prevented on Android
26 devices that are part of Google’s so-called Advanced Protection Program (“APP”). Consumers who
27 enroll in APP cannot directly download apps; their Android device can only download apps
28 distributed in the Google Play Store or in another pre-installed app store that Google pre-approved

1 an OEM to offer on its devices. App developers therefore cannot reach APP users unless they first
2 agree to distribute their apps through the Google Play Store or through a separate Google-approved,
3 OEM-offered app store, where available.

4 157. And while downloading by consumers of competing Android app stores directly to
5 consumers is nominally available for those that have not enrolled in APP, the same restrictions
6 Google imposes on the direct downloading of apps apply to the direct downloading of app stores.
7 Indeed, Google Play Protect, a default program that Google has created to periodically scan Android
8 devices and delete or disable potentially harmful apps, has flagged at least one competing Android
9 app store, Aptoide, as “harmful,” further hindering consumers’ ability to access a competing app
10 store.

11 158. Under the guise of security concerns, Google has taken steps to actively dissuade or
12 altogether prevent users from downloading apps outside the Google Play Store. For instance,
13 Google has implemented a more “opinionated design” that dissuades users from installing apps
14 outside of the Google Play Store by “increasing the cognitive load for proceeding.” Google added
15 a “red icon with an exclamation mark” and moved the option to proceed to a less prevalent location.

16 159. But the vast majority of users don’t even get to these warnings. Google has
17 programmed Android to contain default settings that completely block downloading. According to
18 Google’s internal documents, a full 68% of devices worldwide maintain the default setting
19 preventing downloading from “unknown sources.” For these devices, no apps or app stores can be
20 installed outside of the Google Play Store.

21 160. And even for those devices whose users have changed the default setting, Google
22 has intentionally created “much more friction” for installing apps from what it deemed “unknown
23 sources” outside of the Google Play Store. Google has required multiple steps for users to change
24 settings and provide consent each time a user wants to sideload such an app from a so-called
25 “unknown source” or use such an app pre-installed by OEMs. Google does this even though users
26 are well aware of the sources of the apps.

27 161. Even when a user has been able to successfully navigate Google’s thicket of
28 technical barriers and download or sideload an app, Google denies the app the permissions

1 necessary to be seamlessly updated in the background—a benefit reserved solely for apps
 2 downloaded via Google Play Store. Instead, users must manually trigger updates, which may even
 3 require revisiting the original download process, complete with its hurdles and warnings. This
 4 imposes onerous obstacles on consumers who wish to keep the most current version of an app on
 5 their mobile device and further drives consumers away from direct downloading or sideloading and
 6 toward the Google Play Store. For instance, Amazon’s website explains that updating an app on
 7 Amazon’s Android app store requires a user to follow a multi-step process: “1. Open the app store
 8 you used to install the app on your device. 2. Search for the app and open the app’s detail page. 3.
 9 If an update is available, an Update option displays.” By making the app update process difficult,
 10 Google further discourages users from seeking out rival app stores and the apps offered therein.

11 162. There is no legitimate reason for Google’s overly restrictive technical barriers. To
 12 the extent that Google claims it is concerned about security, much of what it does amounts to
 13 security theatre. Google internal documents explain that tagging an app as “unknown” “usually
 14 boils down to not being Play or a pre-installed OEM store.” Google admits that its security team is
 15 not really concerned about installations that take place outside of the Google Play Store because
 16 they have not been “proven a big risk.” Citing the Epic game Fortnite as an example, Google
 17 acknowledged that it “[c]urrently run[s] GPP on 2.6B devices and only saw 600 device that had
 18 PHA installed that is actually malware related to Fortnite.” Thus, Google recognizes that “app stores
 19 generally have relatively low malware install rates”—*i.e.*, the rate by which malware accesses a
 20 device through an app installed from that app store—with the Epic store having an app malware
 21 install rate of around 0% and Amazon having an app malware install rate of around 0.7%.

22 163. Indeed, Google used its technical barriers to ensure that Amazon was never able to
 23 distribute its app store on enough devices to be a legitimate competitive threat. As early as 2011,
 24 Google recognized that requiring users go through the “install friction” of a 7-click unknown
 25 sources process to install Amazon’s app store limited Amazon’s installed base and made it unlikely
 26 that Amazon would succeed at mobile-device content distribution. By 2016, Google had increased
 27 the unknown sources install friction to 9 steps and added at least two security scare warnings into
 28 the process.

1 164. In 2017, Google also discussed additional ways to keep users and developers on the
2 Google Play Store and off of Amazon’s app stores, including by “[d]isabl[ing] profile porting (via
3 policy)” and by “create[ing] more third party [install] friction”, which it referred to as “speed bump
4 type hurdles.” That same year, Amazon asked Google to whitelist its apps and app store so that
5 users did not have to go through the “unknown sources” friction. In connection with this request,
6 Amazon offered to share documentation of its security and approval processes of third-party apps
7 to ensure they would be compliant. Despite the additional security assurances, Google still refused
8 Amazon’s request. Google had no legitimate reason to refuse Amazon’s request. Rather, consistent
9 with its view that “unknown source” friction kept users and developers on the Google Play Store,
10 Google used its technical barriers to suppress competition from Amazon.

11 165. Even if Google had a legitimate reason for implementing its technical barriers, it has
12 not adopted the least restrictive means for achieving it. For decades, PC users have installed
13 software acquired from various sources without being deterred by anything like the obstacles
14 erected by Google. A PC user can navigate to an internet webpage, click to download and install an
15 application, and be up and running, often in a matter of minutes. Security screening is conducted
16 by a neutral security software operating in the background, allowing users to download software
17 from any source they choose (unlike Android). Any claimed security benefits resulting from
18 Google’s Advanced Protection Program, Google Play Protect, Google’s imposition of multiple
19 layers of warnings and consents, or Google’s restriction on automatic updates can be achieved
20 through less restrictive means, allowing for alternative application distribution mechanisms while
21 still protecting users from malware and other security issues.

22 166. Google’s invocation of security is an excuse to further foreclose and limit the apps
23 available to Android users, as shown by a comparison to personal computers, where users can
24 securely purchase and download new software without being limited to a single software store
25 owned or approved by the user’s anti-virus software vendor. This comparison shows that Google’s
26 multiple technical barriers to direct downloading and sideloading from alternative sources go far
27 beyond what is necessary to achieve any legitimate security objectives. Put differently, Google has
28 not adopted the least restrictive means necessary for achieving any legitimate security objectives.

1 167. Thus, downloading outside of the Google Play Store has not been a broadly and
 2 commercially viable way for non-Google Play Store app stores to reach Android users, any more
 3 than they are a viable alternative for single apps.

4 168. But for Google's restrictions on direct downloading, app distributors and developers
 5 could more easily distribute their stores and apps directly to consumers. As explained above, Google
 6 makes direct downloading substantially and unnecessarily difficult, and in some cases prevents it
 7 entirely, further narrowing this already narrow alternative distribution channel.

8 **D. Anticompetitive Effects in the Android Application Distribution Market**

9 169. Through its anticompetitive acts, including contractual provisions and exclusionary
 10 technical obstacles, Google has willfully obtained a near-absolute monopoly over the Android
 11 Application Distribution Market. Google Play Store downloads have accounted for more than 90%
 12 of downloads through Android app stores, dwarfing other available distribution channels.

13 170. Google's anticompetitive conduct has substantially foreclosed competition in the
 14 Android Application Distribution Market, affected a substantial volume of commerce in this
 15 market, and caused anticompetitive harms to consumers.

16 171. As described above, Google's anticompetitive conduct forces OEMs to dedicate
 17 valuable "home screen" real estate to the Google Play Store and other mandatory Google
 18 applications, regardless of the OEM's preferences, which might include allowing other app stores
 19 or developers to place an icon there. Individually and together, these requirements limit OEMs'
 20 ability to differentiate themselves and compete by offering innovative and more appealing (in terms
 21 of price and quality) distribution platforms for apps. Google's restrictions also interfere with OEMs'
 22 ability to compete with each other by offering Android mobile devices with tailored combinations
 23 of pre-installed apps that would appeal to particular subsets of mobile device consumers.

24 172. Google's anticompetitive conduct harms consumers because would-be competitor
 25 app distributors – including well-resourced potential competitors such as Amazon – are
 26 substantially foreclosed from the market. As a result, consumers pay higher than competitive prices
 27 for their applications

1 173. Consumers are harmed by Google’s supra-competitive taxes of up to 30% on the
2 purchase price of apps and in-app purchases distributed directly or indirectly through the Google
3 Play Store, which is a much higher transaction fee than would exist in a competitive market
4 unimpaired by Google’s anticompetitive conduct. Google also prevents developers from charging
5 less than \$.99 for non-zero priced applications. Google’s supra-competitive tax raises prices for
6 consumers and reduces the output of mobile apps and related content.

7 174. Consumers are also harmed by the depressed innovation resulting from Google’s
8 conduct. Absent Google’s conduct, the market would see more innovation in apps and new models
9 of app distribution alike.

10 175. Google’s anticompetitive conduct also harms app developers, who must agree to
11 Google’s anticompetitive terms and conditions if they want access to Google’s monopolized
12 Android app markets and the large number of Android users captured therein. Google’s restrictions
13 prevent developers from experimenting with alternative app distribution models, such as providing
14 apps directly to consumers, selling apps through curated app stores, creating their own competing
15 app stores, or forming business relationships with OEMs who can pre-install apps. By restricting
16 developers, Google ensures that the developers’ apps will be distributed through the Google Play
17 Store and Google Play Billing, which empowers Google to monitor the apps’ usage. By depriving
18 app developers of a market price for their apps, the tax reduces developers’ incentive and capital to
19 develop new apps and content and harms consumers. This, too, harms consumers, reducing output
20 and depriving them of the opportunity to obtain such apps.

21 176. Consumers are further harmed because Google’s control of app distribution reduces
22 developers’ ability and incentive to distribute apps in different and innovative ways—for example,
23 through genre-specific app stores. Google, by restraining the distribution market and eliminating
24 the ability and incentive for competing app stores, also limits consumers’ ability to discover new
25 apps of interest to them. More competing app stores would permit additional platforms to feature
26 diverse collections of apps. Instead, consumers are left to sift through millions of apps in one
27 monopolized app store, where Google controls which apps are featured, identified, or prioritized in
28 user searches.

1 **IV. GOOGLE UNLAWFULLY MAINTAINS A MONOPOLY IN THE IN-APP
2 AFTERMARKET**

3 177. App developers can monetize their apps by selling digital content within a mobile
4 app. Many apps make additional content available for in-app purchasing on an à la carte basis or
5 via a subscription-based service. App developers who sell digital content rely on in-app payment
6 processing or billing tools to process consumers' purchases in a seamless and efficient manner.

7 178. Not only does Google control the market for the initial distribution of apps, but it
8 leverages this control to monopolize the In-App Aftermarket, thereby dominating the distribution
9 of aftermarket accessories or enhancements of those apps, including renewals of the apps in the
10 case of subscriptions. To distribute those in-app products, a developer must have a distribution
11 channel that permits users to add those aftermarket items, and a payments system that allows it to
12 transact those sales.

13 179. Through its anticompetitive restrictions, Google provides developers with no choice
14 but to use Google Play and Google Play Billing for all in-app transactions—sales of app accessories,
15 enhancements, and upgrades those developers make after the initial download. Google deprives
16 developers of this choice in order to charge an anticompetitive toll—up to 30%—forever. And
17 Google enforces its toll through two primary restrictions: (1) tying the use of its payments system,
18 Google Play Billing, to all in-app purchases; and (2) prohibiting app developers from advertising,
19 linking to, or otherwise steering users to any outside distribution channels.

20 **A. Google's Anticompetitive Conduct in the In-App Aftermarket**

21 180. Google's anticompetitive conduct targeting the In-App Aftermarket has foreclosed
22 developers' ability to distribute their in-app products through alternative channels, including
23 directly to their customers, and, in so doing, has foreclosed the use of competitive payment systems
24 to transact in-app purchases.

25 181. Google's "forever 30% in-app purchase revenue share" is enforced in two primary
26 ways: *first*, by contractually prohibiting developers from distributing to their existing customers
27 outside of Google Play, either by (1) using customer information to contact them directly (DDA,
28 Section 4.9) or (2) steering those customers *within their own apps* to another store or to the

1 developers' own website (DDA, Section 4.5); and *second*, by imposing a tie-in of the payment
 2 system, Google Play Billing, allowing Google to better enforce its anticompetitive restrictions.

3 182. The former constitutes exclusive dealing, requiring developers to use Google Play
 4 forever, and the latter constitutes an illegal tie-in, depriving developers of the ability to utilize any
 5 one of the multitudes of electronic payments systems available, or that could be available if
 6 Google's restrictions were not in place, and foreclosing competition from rival payment systems.

7 183. For apps distributed through the Google Play Store, Google requires use of Google
 8 Play Billing to process in-app purchases of digital content and for all in-app purchases. Google
 9 unlawfully ties its Google Play Store to Google Play Billing through provisions of Google's DDA
 10 imposed on all developers seeking access to Android users. Section 3.2 of the DDA requires that
 11 Android app developers enter into a separate agreement with Google's payment processor, Google
 12 Payment, to receive payment for and from apps and in-app digital content.

13 184. Further, Section 4.1 of the DDA makes compliance with Google's Developer
 14 Program Policies mandatory, and those Policies require in relevant part that app developers (1)
 15 offering products within an app downloaded through the Google Play Store, (2) providing access
 16 to app content, or (3) offering products within another category of app downloaded through the
 17 Google Play Store must use Google Play Billing as the method of payment, except when the
 18 payment is for physical products or digital content that may be consumed outside of the app itself
 19 (*e.g.*, songs that can be played on other music players).

20 185. Google's unlawful restraints in the DDA prevent app developers from integrating
 21 alternative, even multiple, payment processing solutions into their mobile apps, depriving app
 22 developers and consumers alike of a choice of competing payment processors. This, in turn, stifles
 23 the development of efficient alternative application delivery stores for in-app purchases. Since
 24 developers are required to use Google's payment processing system, alternative distribution
 25 mechanisms cannot compete by offering seamless and frictionless sales of in-app purchases through
 26 alternative payment systems at lower prices.

27
 28

1 186. Furthermore, because 90% or more of Android-compatible mobile app downloads
2 through an app store are conducted in the Google Play Store, tying Google Play Billing to Google
3 Play Store substantially forecloses the In-App Aftermarket to competitive payment systems.

4 187. Absent Google's unlawful conduct, app developers could integrate compatible
5 payments systems into their apps to facilitate in-app digital content purchases or develop such
6 functionality themselves. Developers could restrict the number of payment options, choosing to
7 minimize costs by offering only PayPal as an option, for example. Or, developers could choose to
8 offer a wide range of payment options, either through their own infrastructure or through a third-
9 party payment processing provider. More importantly, without Google's requirement that
10 developers use Google Play Billing, developers could offer an efficient alternative to Google for
11 the distribution and frictionless payment of in-app purchases. This would, in turn, result in lower
12 prices for consumers and reduce developers' costs for receiving payment.

13 188. Payment systems to transact in-app purchases are separate products for which there
14 is separate demand. For example, the crux of developer Epic's claims in the related case is based
15 on Epic's attempt to provide a choice of payment systems to consumers within the apps Epic
16 develops. Epic claims that this choice would have resulted in consumers paying less for in-app
17 products purchased within the Epic app. However, consumers never got that opportunity because
18 Google removed Epic's apps from the Google Play Store upon discovery of Epic providing this
19 alternative product for consumer consumption.

20 189. In addition, Epic's search for payment processing demonstrates payment processing
21 as a separate product with a separate demand. Epic actively sought bids to provide payment
22 processing services within its app store from various providers. Epic was approached by Coda
23 Payments in March 2020 to provide billing services through its Codashop system, which is widely
24 used in Asia. The ability to choose a non-Google payments system for in-app transactions could
25 save a developer, and hence consumers, tens of millions of dollars. Indeed, Coda quoted to Epic a
26 non-territory specific all-in fee of 7-10%, far below the 30% demanded by Google Play Billing.
27 Today, the Epic Games Store provides developers with a choice of using the developers own
28 payment processor, or Epic's payment system, Epic Direct Payment.

1 190. And alternate payment systems can be just as seamless as Google's. For example,
2 Codashop's payments system ensures that users do not have to register or log-in when purchasing
3 digital, in-app goods or services. Absent Google's tie of Google Play Billing for all aftermarket
4 transactions, developers would be able to use Codashop or some other much less costly payments
5 system.

6 191. Similarly, Netflix, Spotify, and Tinder, some of the nation's largest and most
7 popular subscription services, have repeatedly sought to bypass Google Play Billing. In particular,
8 Netflix wanted an alternative payments system. Apparently in an effort to ameliorate this
9 displeasure, Google offered to take a significantly reduced revenue share percentage to Netflix. Not
10 all developers, however, have met with Netflix's success, even though many have sought to use
11 their own payment systems.

12 192. In short, competitive payment systems could be offered, absent Google's
13 restrictions, to developers for the same resulting benefits and transactions. Potential competitors
14 include Stripe, PayPal, Square, and Codashop, among others.

15 193. Google has no legitimate justifications for its exclusionary conduct and tie-in. Tying
16 Google Play Store to in-app payment systems is not technologically or commercially necessary. If
17 Google were concerned, for example, about the security of its users' payment information, then it
18 would not permit alternative payment processing for certain transactions made on Android
19 smartphones and tablets for physical products or digital content consumed outside an app. But
20 Google does allow alternative payment processing tools in that context, with no diminution in
21 security. Likewise, absent the restrictions, Google would continue to invest in the Google Play
22 Store. Google's core business is search, and wide adoption of the Android ecosystem, including the
23 Play Store, are critical to its continued success. Google also earns billions of dollars through targeted
24 and other digital advertising – dollars that would be at stake were Google to discontinue investing
25 in the Google Play Store.

26 194. In addition to tying Google Play Billing to aftermarket in-app transactions, as
27 discussed above, Google uses Sections 4.5 and 4.9 of the DDA to impose restraints prohibiting app
28 developers from steering to distribution channels outside of the Google Play Store. These

1 restrictions reinforce Google's tie in of aftermarket distribution, including Google Play Billing, and,
 2 separately, constitute exclusive dealing. Google's restrictions ensure that once a developer acquires
 3 a customer through the Google Play Store, it must use the Play Store for all subsequent sales to that
 4 customer. Developers are even prohibited from using their own customer information to efficiently
 5 communicate with those customers directly, through their applications. It has thus effectively
 6 foreclosed developers from efficiently providing information to consumers about lower cost
 7 channels.

8 195. These anti-steering, tying, and exclusive dealing provisions hinder the development
 9 of truly competitive application delivery stores, which could also be used to facilitate and process
 10 in-app transactions.

11 **B. Google's Monopoly Power in the In-App Aftermarket**

12 196. Google has monopoly power in the In-App Aftermarket, evidenced through its
 13 ability to exclude competition through its contractual restraints and to impose prices that far exceed
 14 competitive levels.

15 197. Indeed, Google's charge of a usual 30% commission for Google Play Billing reflects
 16 Google's monopoly power, which allows it to charge supra-competitive prices for payment
 17 processing. For example, the 30% commission is far higher than the 6% revenue share that Google
 18 itself has calculated as its break-even level. Google's commission also greatly exceeds the cost of
 19 alternative electronic payment processing tools, which can be one-tenth of the 30% cost of Google
 20 Play Billing.

21 198. Google's internal documents recognize that its billing processing fee well exceeds
 22 the cost of providing those services, and that it could profitably dis-integrate the billing software
 23 such that developers would have choices—many of which are less expensive than Google's.

24 199. In fact, internally, Google freely admits that its “rev share @ 30%” has “[n]o
 25 rationale, other than copying Apple.”

26 200. Google's market power is durable. Through the conduct described above, Google
 27 has erected barriers to entry to any would-be competitor in the aftermarket for in-app transactions
 28 and ensured its unfettered continued exercise of monopoly power.

1 **C. Anticompetitive Effects in the In-App Aftermarket**

2 201. Google's conduct harms competition in the In-App Aftermarket, substantially
3 foreclosing the ability of competitive distribution and payment systems from offering their services
4 to the vast majority of developers, since almost all developers distribute through the Google Play
5 Store.

6 202. Absent Google's anticompetitive restrictions, developers could compete in the In-
7 App Aftermarket themselves, or partner with third-party distribution and payment systems. Those
8 systems might provide a better or more customized service than Google's and, in a competitive
9 world, would do so at vastly lower prices.

10 203. Google's conduct, in turn, injures consumers, who pay more for their in-app
11 purchases.

12 204. Google's conduct also harms consumers because would-be competitor in-app
13 payment processors are not free to innovate and offer Android mobile device consumers alternative
14 payment processing tools with better functionality, lower prices, tighter security, and the protection
15 of user data, including purchase history. Absent Google's Developer Program Policies, for example,
16 developers could offer consumers a choice of in-app payment processors for each purchase made
17 by the consumer, including payment processors at a lower cost and with better customer service.

18 205. In addition, Google's conduct prevents app developers from providing users
19 comprehensive customer service relating to in-app payments without Google's involvement.
20 Google has little incentive to compete through improved customer service because it faces no
21 competition.

22 206. Google does, however, have an incentive to obtain information concerning
23 developers' transactions with their customers, which Google can use to give its ads and search
24 businesses an anticompetitive edge. This is true regardless of whether the developer or the app's
25 users would prefer not to share their information with Google. In these ways and others, Google
26 directly harms users.

27 207. Google has also raised consumers' prices (and reduced developers' revenue)
28 through its supra-competitive up to 30% tax on in-app purchases, a toll it could not maintain in a

1 competitive in-app distribution and payment systems market. The resulting increase in prices for
 2 in-app content has likely deterred some consumers from making purchases. The supra-competitive
 3 tax rate also reduces developers' incentive to invest in and create additional apps and related in-app
 4 content for consumers.

5 **V. ANTITRUST INJURY**

6 208. Plaintiffs and Class Members have suffered antitrust injury as a direct result of
 7 Google's unlawful conduct. Google Play Store commissions and fees generated more than \$21.5
 8 billion in revenue for Google in 2018. If Google had operated the Google Play Store in a competitive
 9 market, free of Google's anticompetitive restraints, then the fees and commissions that Google
 10 could have collected from developers would have been far lower, and as a result Plaintiffs and Class
 11 Members would have paid significantly less for the applications and in-app purchases they made.

12 209. By impairing competition in the Android Application Distribution Market, Google's
 13 unlawful conduct has enabled it to charge supra-competitive prices for Android apps and in-app
 14 purchases.

15 210. In addition, by impairing competition in the In-App Aftermarket, Google's unlawful
 16 conduct has enabled it to charge supra-competitive prices for in-app digital content.

17 211. Plaintiffs and the Class are the direct purchasers of Android apps and make in-app
 18 purchases directly from Google. When Plaintiffs and the Class purchased Android apps, they did
 19 so directly from Google and paid Google directly through Google Play Billing, using their credit
 20 card or other payment sources. When Plaintiffs and the Class purchased in-app digital content, they
 21 did so through the Google Play Store, using the pre-established payment streams set up when
 22 purchasing that app or other apps using Google Play Billing. When Plaintiffs and the Class made
 23 app and in-app purchases, they paid Google directly.

24 212. In addition to harming consumers, Google's conduct has harmed developers.
 25 Developers face restrictions inhibiting innovation and even more widespread distribution. Absent
 26 Google's conduct, developers would be free to add features to their applications without Google's
 27 stamp of approval, and would have alternative means to reach consumers, including through easily
 28 accessible specialized app stores that would enable them to better target those consumers who might

1 have an interest in their applications. In short, Google's conduct harms competition on all sides of
2 its platform.

3 **VI. CLASS ALLEGATIONS**

4 213. Plaintiffs bring this action for themselves and as a class action under Rules 23(a),
5 23(b)(2), and 23(b)(3) of the Federal Rules of Civil Procedure on behalf of the following classes
6 (the "Class"):

7 **THE NATIONWIDE CLASS:**

8 **All persons in the United States who paid for an app through the Google Play
9 Store, or paid for in-app digital content (including subscriptions and/or ad free
10 versions) on an app that was offered in the Google Play Store from August 16,
2016, to the present (the "Class Period").**

11 Plaintiffs and the Nationwide Class are claiming damages and seeking
12 injunctive relief for violations of Sections 1 and 2 of the Sherman Act and for
violations of the Cartwright Act and the UCL during the Class Period.

13 **THE REPEALER-STATE CLASS:**

14 All persons in those states whose laws permit indirect purchaser standing and
15 provide for antitrust recovery to indirect purchasers, who paid for an app
through the Google Play Store, or paid for in-app digital content (including
16 subscriptions and/or ad free versions) on an app that was offered in the Google
Play Store from August 16, 2016, to the present (the "Class Period").

17 Plaintiffs and the Repeater-State Class are claiming damages and seeking
18 injunctive relief for violations of the Cartwright Act during the Class Period.

19 214. Specifically excluded from each Class are Defendants; the officers, directors, or
20 employees of any Defendant; any entity in which any Defendant has a controlling interest; any
21 affiliate, legal representative, heir, or assign of any Defendant and any person acting on their behalf.
Also excluded from the Class are any judicial officer presiding over this action and the members of
22 his/her immediate family and judicial staff, all State agencies; and any juror assigned to this action.

23 215. Each Class is readily ascertainable and the records for the Class should exist,
including, specifically, within Defendants' own records and transaction data.

24 216. Due to the nature of the trade and commerce involved, there are tens of millions of
25 geographically dispersed members in the Class, the exact number and their identities being known
26 to Defendants.

1 217. Plaintiffs' claims are typical of the claims of the members of each Class. Plaintiffs
2 and Class Members sustained damages arising out of Defendants' common course of conduct in
3 violation of the laws alleged herein. The damages and injuries of each member of the Class were
4 directly caused by Defendants' wrongful conduct.

5 218. There are questions of law and fact common to the Class, and those questions
6 predominate over any questions affecting only individual Class Members. These common questions
7 of law and fact include, but are not limited to:

- 8 • whether Google has monopoly power in the Android Application Distribution
9 Market;
- 10 • whether Google has monopoly power in the In-App Aftermarket;
- 11 • whether Google's contractual restrictions on OEMs, Mobile Network Carriers
12 and developers further Google's monopolization of the Android Application
13 Distribution Market;
- 14 • whether Google's contractual restrictions on OEMs, Mobile Network Carriers
15 and developers are unreasonable restraints of trade;
- 16 • whether Google's tie of Google Play Billing to distribution through its Google
17 Play Store furthered Google's monopolization of the In-App Aftermarket;
- 18 • whether Google's contractual restrictions limiting payment for in-app digital
19 content to Google Play Billing are unreasonable restraints of trade;
- 20 • whether Google's contractual restrictions requiring developers to exclusively
21 use Google Play for all aftermarket in-app sales are unreasonable restraints of
22 trade;
- 23 • whether Google's imposition of unnecessary and overly broad technical
24 barriers are unreasonable restraints of trade;
- 25 • whether Google's conduct resulted in supra-competitive prices paid by
26 consumers of Android apps and for in-app purchases of Android apps;
- 27 • whether Google's conduct has harmed all participants in the market, including
28 developers and consumers;

- whether Google’s violations of the Sherman Act and the Cartwright Act constitute an unlawful business act or practice within the meaning of the UCL;
 - whether Google’s violations of the Sherman Act and the Cartwright Act constitute an unlawful business act or practice within the meaning of the UCL;
 - whether Google’s conduct constitutes an unfair business act or practice within the meaning of the UCL;
 - whether Google’s conduct constitutes a fraudulent practice within the meaning of the UCL;
 - the appropriate Class-wide measures of damages and restitution; and
 - whether the Class is entitled to the injunctive relief sought on behalf of the Class and/or to protect the public from Google’s anticompetitive acts and other misconduct alleged herein.

219. A class action is superior to other available methods for the fair and efficient adjudication of this controversy. The prosecution of separate actions by individual Class Members would impose heavy burdens on the courts and Defendants and would create a risk of inconsistent or varying adjudications of the questions of law and fact common to the Class. A class action, on the other hand, would achieve substantial economies of time, effort, and expense and would assure uniformity of decision as to persons similarly situated without sacrificing procedural fairness or bringing about other undesirable results. Absent a class action, it would not be feasible for the vast majority of the Class Members to seek redress for the violations of law alleged herein.

CLAIMS

A. Claims for a Nationwide Class

220. Plaintiffs, as direct purchasers under *Apple v. Pepper*, allege violations of the federal antitrust laws as set forth below.

COUNT 1: Sherman Act § 2 Unlawful Monopolization in the Android Application Distribution Market
(Against all Defendants except Google Payment)

221. Plaintiffs restate, reallege, and incorporate by reference each of the allegations set forth in the rest of this Complaint as if fully set forth herein.

1 222. Google's conduct violates Section 2 of the Sherman Act, which prohibits the
2 "monopoliz[ation of] any part of the trade or commerce among the several States, or with foreign
3 nations." 15 U.S.C. § 2.

4 223. The Android Application Distribution Market is a valid antitrust market.

5 224. Google holds monopoly power in the Android Application Distribution Market.

6 225. Google has unlawfully maintained monopoly power in the Android Application
7 Distribution Market through the anticompetitive acts described herein, including, but not limited
8 to: (1) leveraging its Android OS and Google suite of products to impose anticompetitive
9 contractual restrictions in its agreements with OEMs and app developers; (2) conditioning licensing
10 of the Google Play Store, as well as other essential Google services and the Android trademark, on
11 OEMs' agreement give the Google Play Store preferential placement and treatment; (3) imposing
12 technical restrictions and obstacles on both OEMs and developers that prevent the distribution of
13 Android apps through means other than the Google Play Store; and (4) conditioning app developers'
14 ability to effectively advertise their apps to Android users on being listed in the Google Play Store.

15 226. Google's conduct affects a substantial volume of interstate as well as foreign
16 commerce.

17 227. Google's conduct has substantial anticompetitive effects, including increased prices
18 to consumers and costs to developers, reduced innovation and quality of service, and lowered output
19 to consumers.

20 228. Google's conduct lacks procompetitive justifications. Alternatively, to the extent
21 that any legitimate justifications exist, they are far outweighed by the anticompetitive effects of
22 Google's conduct and could have been achieved through less restrictive alternatives.

23 229. Plaintiffs and the Class were harmed by Defendants' anticompetitive conduct in a
24 manner that the antitrust laws were intended to prevent. They paid more for Android apps and in-
25 app purchases than they would have paid in a competitive market. Plaintiffs and the Class were also
26 injured because Google's unlawful monopolization of the Android apps and in-app purchases
27 extinguished Plaintiffs' and the Class's freedom to choose between the Google Play Store and
28 lower-cost market alternatives that would have been available had Google not monopolized the

1 market. Additionally, Plaintiffs and the Class were injured because Google's establishment and
 2 maintenance of monopoly pricing has caused a reduction in the output and supply of Android apps
 3 and in-app purchases, which would have been more abundantly available in a competitive market.

4 230. Plaintiffs and the Class have suffered and continue to suffer damages and irreparable
 5 injury, and such damages and injury will not abate until an injunction issues ending Google's
 6 anticompetitive conduct.

7 **COUNT 2: Sherman Act § 1 Unreasonable Restraints of Trade Concerning the Android**
 8 **Application Distribution Market: OEMs**
 9 **(Against all Defendants except Google Payment)**

10 231. Plaintiffs restate, reallege, and incorporate by reference each of the allegations set
 forth in the rest of this Complaint as if fully set forth herein.

11 232. Defendants' conduct violates Section 1 of the Sherman Act, which prohibits
 12 "[e]very contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade
 13 or commerce among the several States, or with foreign nations." 15 U.S.C. § 1.

14 233. Google entered into agreements with OEMs that unreasonably restrict competition
 15 in the Android Application Distribution Market. These include, but are not limited to, anti-forking
 16 agreements and MADAs with OEMs that condition their access to the Google Play Store and other
 17 "must have" Google services on the OEM offering the Google Play Store as the primary (and often
 18 the only) viable app store on Android mobile devices.

19 234. These agreements serve no legitimate or procompetitive purpose that could justify
 20 their anticompetitive effects, and thus unreasonably restrain competition in the Android Application
 21 Distribution Market. Alternatively, to the extent that any legitimate justifications exist, they are far
 22 outweighed by the anticompetitive effects of Google's conduct and could have been achieved
 23 through less restrictive alternatives.

24 235. Google's conduct affects a substantial volume of interstate as well as foreign
 25 commerce.

26 236. Google's conduct has substantial anticompetitive effects, including increased prices
 27 to consumers and costs to developers, reduced innovation and quality of service, and lowered
 28 output.

1 237. Plaintiffs and the Class were harmed by Defendants' anticompetitive conduct in a
 2 manner that the antitrust laws were intended to prevent. They paid more for Android apps and in-
 3 app purchases than they would have paid in a competitive market. Plaintiffs and the Class were also
 4 injured because Google's unlawful restraints of trade extinguished Plaintiffs' and the Class's
 5 freedom to choose between the Google Play Store and lower-cost market alternatives that would
 6 have been available had Google not restrained competition. Plaintiffs and the Class were further
 7 injured because Google's establishment and maintenance of supra-competitive pricing has caused
 8 a reduction in the output and supply of Android apps and in-app purchases, which would have been
 9 more abundantly available in a competitive market.

10 238. Plaintiffs and the Class have suffered and will continue to suffer damages and
 11 irreparable injury, and such damages and injury will not abate until an injunction issues ending
 12 Google's anticompetitive conduct.

13 **COUNT 3: Sherman Act § 1 Unreasonable Restraints of Trade Concerning
 14 the Android Application Distribution Market: Developer Distribution Agreements**

15 **(Against all Defendants except Google Payment)**

16 239. Plaintiffs restate, reallege, and incorporate by reference each of the allegations set
 17 forth in the rest of this Complaint as if fully set forth herein.

18 240. Defendants' conduct violates Section 1 of the Sherman Act, which prohibits
 19 "[e]very contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade
 20 or commerce among the several States, or with foreign nations." 15 U.S.C. § 1.

21 241. Google forces app developers to enter its standardized Developer Distribution
 22 Agreement, including Developer Program Policies integrated into that Agreement, as a condition
 23 of their apps being distributed through the Google Play Store. The relevant provisions of these
 24 agreements unreasonably restrain competition in the Android Application Distribution Market.

25 242. Section 4.5 of the Developer Distribution Agreement provides that developers "may
 26 not use Google Play to distribute or make available any Product that has a purpose that facilitates
 27 the distribution of software applications and games for use on Android devices outside of Google
 28 Play." Section 4.1 of the DDA requires that all developers "adhere" to Google's Developer Program
 Policies. Under the guise of its so-called "Malicious Behavior" Policy, Google prohibits developers

1 from distributing apps that “download executable code [*i.e.*, code that would execute an app] from
2 a source other than Google Play.” The DDA further reserves to Google the right to remove and
3 disable any Android app that it determines violates either the DDA or its Developer Program
4 Policies and to terminate the app on these bases. (§§ 8.3, 10.3.) These provisions prevent app
5 developers from offering competing app stores through the Google Play Store, even though there
6 is no legitimate technological or other impediment to distributing a competing app store through
7 the Google Play Store.

8 243. These agreements serve no legitimate or procompetitive purpose that could justify
9 their anticompetitive effects, and thus unreasonably restrain competition in the Android Application
10 Distribution Market. Alternatively, to the extent that any legitimate justifications exist, they are far
11 outweighed by the anticompetitive effects of Google’s conduct and could have been achieved
12 through less restrictive alternatives.

13 244. Google’s conduct affects a substantial volume of interstate as well as foreign
14 commerce.

15 245. Google’s conduct has substantial anticompetitive effects, including increased prices
16 to consumers and costs to developers, reduced innovation and quality of service, and lowered
17 output.

18 246. Plaintiffs and the Class were harmed by Defendants’ anticompetitive conduct in a
19 manner that the antitrust laws were intended to prevent. They paid more for Android apps and in-
20 app purchases than they would have paid in a competitive market. Plaintiffs and the Class were also
21 injured because Google’s unlawful restraints of trade extinguished Plaintiffs’ and the Class’s
22 freedom to choose between the Google Play Store and lower cost market alternatives that would
23 have been available had Google not restrained competition. Plaintiffs and the Class were further
24 injured because Google’s establishment and maintenance of supra-competitive pricing has caused
25 a reduction in the output and supply of Android apps and in-app products, which would have been
26 more abundantly available in a competitive market.

27
28

247. Plaintiffs and the Class have suffered and continue to suffer damages and irreparable injury, and such damages and injury will not abate until an injunction issues ending Google's anticompetitive conduct.

COUNT 4: Sherman Act § 2 Unlawful Monopolization in the In-App Aftermarket
(Against all Defendants)

248. Plaintiffs restate, reallege, and incorporate by reference each of the allegations set forth in the rest of this Complaint as if fully set forth herein.

249. Google's conduct violates Section 2 of the Sherman Act, which prohibits the "monopoliz[ation of] any part of the trade or commerce among the several States, or with foreign nations." 15 U.S.C. § 2.

250. The In-App Aftermarket is a valid antitrust market.

251. Google holds monopoly power in the In-App Aftermarket.

252. Google has unlawfully maintained its monopoly power in the In-App Aftermarket, including through the anticompetitive acts described herein. For apps distributed through the Google Play Store, Google in its DDA with app developers imposes multiple anticompetitive restrictions. First, it prohibits developers from distributing to their existing customers outside of Google Play, either by (1) using customer information to contact them directly or (2) steering those customers within the app to another store or to the developers' own website. Second, it imposes a tie in of the payment system, Google Play Billing, allowing Google to better enforce its anticompetitive restrictions.

253. The former constitutes exclusive dealing, requiring developers to use Google Play forever, and the latter constitutes an illegal tie in, depriving developers of the ability to utilize any one of the multitudes of electronic payments systems available, or that could be available if Google's restrictions were not in place, and foreclosing competition from rival payment systems.

254. Google's conduct affects a substantial volume of interstate as well as foreign commerce by completely foreclosing developers' ability to distribute their in-app products through alternative channels, including directly to their customers, and, in so doing, foreclosing competitive payment systems from competing to transact in-app purchases.

1 255. Google's conduct has substantial anticompetitive effects, including increased prices
 2 to consumers and costs to app developers, reduced innovation and quality of service, and lowered
 3 output.

4 256. Google's conduct lacks any legitimate, procompetitive justification. Alternatively,
 5 to the extent that any legitimate justifications exist, they are far outweighed by the anticompetitive
 6 effects of Google's conduct and could have been achieved through less restrictive alternatives.

7 257. Plaintiffs and the Class were harmed by Defendants' anticompetitive conduct in a
 8 manner that the antitrust laws were intended to prevent. They paid more for Android in-app
 9 purchases than they would have paid in a competitive market. Plaintiffs and the Class were also
 10 injured because Google's unlawful monopolization of the Android apps and in-app purchases has
 11 extinguished Plaintiffs' and the Class's freedom to choose between the Google Play Store and
 12 lower-cost market alternatives that would have been available had Google not monopolized the
 13 market. Plaintiffs and the Class were further injured because Google's establishment and
 14 maintenance of monopoly pricing has caused a reduction in the output and supply of Android apps
 15 and in-app purchases, which would have been more abundantly available in a competitive market.

16 258. Plaintiffs and the Class have suffered and continue to suffer damages and irreparable
 17 injury, and such damages and injury will not abate until an injunction issues ending Google's
 18 anticompetitive conduct.

**COUNT 5: Sherman Act § 1 Unreasonable Restraints of Trade Concerning the In-App
 Aftermarket**
(Against all Defendants)

21 259. Plaintiffs restate, reallege, and incorporate by reference each of the allegations set
 22 forth in the rest of this Complaint as if fully set forth herein.

23 260. Defendants' conduct violates Section 1 of the Sherman Act, which prohibits
 24 "[e]very contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade
 25 or commerce among the several States, or with foreign nations."

26 261. Google forces app developers to enter its standardized DDA, including Developer
 27 Program Policies integrated into that Agreement, as a condition of having their apps distributed
 28 through the Google Play Store. The relevant provisions of these agreements unreasonably restrain

1 and substantially foreclose competition through exclusive dealing and tying arrangements in the
 2 Android In-App Aftermarket, as described above.

3 262. Sections 4.5 and 4.9 prohibit of the DDA prohibit developers who have used the
 4 Google Play Store once from ever going elsewhere to distribute their in-app products, and therefore
 5 constitute exclusive dealing in violation of Section 1 of the Sherman Act. Google's prohibitions on
 6 steering or using alternative mechanisms to distribute in-app products substantially forecloses
 7 competition—in fact, forecloses 100% of the In-App Aftermarket—because no other distribution
 8 avenue or app store can compete for those sales.

9 263. Google enforces its exclusive dealing arrangement through requiring the use of
 10 Google Play Billing to transact all aftermarket purchases. Section 3.2 of the DDA further requires
 11 that Android app developers enter into a separate agreement with Google's payment processor,
 12 Google Play Billing, in order to receive payment for apps and content distributed through the
 13 Google Play Store. This includes payments related to in-app purchases of digital content. Further,
 14 compliance with Google's Developer Program Policies, which § 4.1 of the DDA makes obligatory,
 15 requires that apps distributed through the Google Play Store “must use Google Play In-app Billing
 16 [offered by Google Payment] as the method of payment” for such in-app purchases. Google's
 17 Policies exclude only certain, limited types of transactions from this requirement, such as the
 18 purchase of “physical products” or of “digital content that may be consumed outside of the app
 19 itself.”

20 264. The challenged provisions serve no sufficient legitimate or procompetitive purpose,
 21 substantially foreclose, and unreasonably restrain competition in the In-App Aftermarket.

22 265. Defendants' conduct affects a substantial volume of interstate as well as foreign
 23 commerce.

24 266. Defendants' conduct has substantial anticompetitive effects, including increased
 25 prices to consumers and costs to developers, reduced innovation and quality of service, and lowered
 26 output.

27 267. Plaintiffs and the Class were harmed by Defendants' anticompetitive conduct in a
 28 manner that the antitrust laws were intended to prevent. They paid more for Android apps and in-

1 app purchases than they would have paid in a competitive market. Plaintiffs and the Class were also
2 injured because Google’s unlawful restraints of trade extinguished Plaintiffs’ and the Class’s
3 freedom to choose between the Google Play Store and lower-cost market alternatives that would
4 have been available had Google not restrained trade. Plaintiffs and the Class were further injured
5 because Google’s establishment and maintenance of supra-competitive pricing has caused a
6 reduction in the output and supply of Android apps and in-app purchases, which would have been
7 more abundantly available in a competitive market.

8 268. Plaintiffs and the Class have suffered and continue to suffer damages and irreparable
9 injury, and such damages and injury will not abate until an injunction issues ending Google's
10 anticompetitive conduct.

**COUNT 6: Sherman Act § 1 Tying In-App Distribution, Including Google Play Billing, to
the Google Play Store**
(Against all Defendants)

13 269. Plaintiffs restate, reallege, and incorporate by reference each of the allegations set
14 forth in the rest of this Complaint as if fully set forth herein.

15 270. Defendants' conduct violates Section 1 of the Sherman Act, which prohibits
16 "[e]very contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade
17 or commerce among the several States, or with foreign nations." 15 U.S.C. § 1.

18 271. Google has unlawfully tied its payment system, Google Play Billing, to the Google
19 Play Store through its DDAs with app developers and its Developer Program Policies.

20 272. Google wields significant economic power in the tying market, the Android
21 Application Distribution Market. With Google Play Store installed on nearly all Android OS
22 devices and over 90% of downloads on Android OS devices being performed by the Google Play
23 Store, Google has overwhelming market power. Google's market power is further evidenced by its
24 ability to extract supra-competitive tax on the sale of apps and in-app purchases through the Google
25 Play Store.

26 273. Google makes the Google Play Store available only to those app developers who
27 agree to exclusively process all app-related payments (including in-app purchases) through Google
28 Play Billing. This tie is especially powerful and effective because Google simultaneously forecloses

1 a developer's ability to use alternative app distribution channels, as described above. Taken
 2 together, Google's conduct effectively forces developers to use Google Play Billing.

3 274. The tying product, the Google Play Store, is distinct from the tied product, the In-
 4 App Aftermarket, which includes the distribution of and payment systems for in-app products. App
 5 developers demand a choice of alternative distribution mechanisms for the distribution of in-app
 6 products, and absent Google's tie in, such distribution mechanisms would be available. They
 7 include the developers' ability to distribute directly, through their websites or the creation of their
 8 own stores, such as the Epic Games Store, or through steering to third-party store, such as Amazon.
 9 But for Google's tie-in, app developers would also have alternative in-app payment system options
 10 and would prefer to choose among them. As described above, such payment systems currently exist
 11 and would be further developed absent Google's conduct. Google's unlawful tying arrangement
 12 thus ties separate products that are in separate markets.

13 275. Google's conduct substantially forecloses competition in the In-App Aftermarket,
 14 affecting a substantial volume of commerce in these markets.

15 276. Google has thus engaged in a *per se* illegal tying arrangement, and the Court does
 16 not need to engage in a detailed assessment of the anticompetitive effects of Google's conduct or
 17 its purported justifications.

18 277. In the alternative only, even if Google's conduct does not constitute a *per se* illegal
 19 tie, a detailed analysis of Google's tying arrangement would demonstrate that this arrangement
 20 violates the rule of reason, substantially foreclosing competition and resulting in competitive injury
 21 in the relevant market.

22 278. Plaintiffs and the Class were harmed by Defendants' anticompetitive conduct in a
 23 manner that the antitrust laws were intended to prevent. They paid more for Android apps and in-
 24 app purchases than they would have paid in a competitive market. Plaintiffs and the Class were also
 25 injured because Google's unlawful restraints of trade extinguished Plaintiffs' and the Class's
 26 freedom to choose between the Google Play Store and lower-cost market alternatives that would
 27 have been available had Google not engaged in a tying arrangement. Plaintiffs and the Class were
 28 further injured because Google's establishment and maintenance of supra-competitive pricing has

1 caused a reduction in the output and supply of Android apps and in-app purchases, which would
 2 have been more abundantly available in a competitive market.

3 279. Plaintiffs and the Class have suffered and continue to suffer damages and irreparable
 4 injury, and such damages and injury will not abate until an injunction issues ending Google's
 5 anticompetitive conduct.

6 **B. California Claims for a Nationwide Class and, in the Alternative, a Repealer
 7 State Class**

8 280. Plaintiffs allege a nationwide class for Defendants' violation of California law, as
 9 set forth in Counts 7-11. Google, LLC is a California Corporation with its principal place of
 10 business in California. Notably, Google, LLC's terms of service provides the following:

11 California law will govern all disputes arising out of or relating to these
 12 terms, service-specific additional terms, or any related services, regardless of
 conflict of laws rules.

13 The Google Play Store incorporates Google, LLC's terms of services.

14 281. In the alternative, Plaintiffs allege a Repealer State Class as set above for violations
 15 of California law as set forth in Counts 7-11.

16 **COUNT 7: California Cartwright Act Unreasonable Restraints of Trade in the
 17 Android Application Distribution Market: OEM Agreements**

18 **(Against all Defendants except Google Payment)**

19 282. Plaintiffs restate, reallege, and incorporate by reference each of the allegations set
 20 forth in the rest of this Complaint as if fully set forth herein.

21 283. Google's acts and practices detailed above violate the Cartwright Act, Cal. Bus. &
 22 Prof. Code § 16700 et seq., which prohibits, *inter alia*, the combination of resources by two or more
 23 persons to restrain trade or commerce or to prevent market competition. *See id.* §§ 16720, 16726.

24 284. Under the Cartwright Act, a "combination" is formed when the anticompetitive
 25 conduct of a single firm coerces other market participants to involuntarily adhere to the
 anticompetitive scheme.

26 285. The Android Application Distribution Market is a valid antitrust market.

27 286. Google has executed agreements with OEMs that unreasonably restrict competition
 28 in the Android Application Distribution Market. Namely, Google entered into anti-forking

1 agreements and MADAs with OEMs that require OEMs to offer the Google Play Store as the
 2 primary—and practically the only—app store on Android mobile devices. These agreements further
 3 prevent OEMs from offering alternative app stores on Android mobile devices in any prominent
 4 visual positioning.

5 287. Google's conduct and practices have substantial anticompetitive effects, including
 6 increased prices to consumers and costs to developers, reduced innovation, poorer customer service
 7 and lowered output.

8 288. It is appropriate to bring this action under the Cartwright Act because many of the
 9 illegal agreements were made in California and purport to be governed by California law, many
 10 affected consumers reside in California, Google has its principal place of business in California and
 11 overt acts in furtherance of Google's anticompetitive scheme took place in California.

12 289. Plaintiffs and the Class were harmed by Defendants' anticompetitive conduct in a
 13 manner that the Cartwright Act was intended to prevent. They paid more for Android apps and in-
 14 app purchases than they would have paid in a competitive market. Plaintiffs and the Class have also
 15 been injured because Google's unlawful restraints of trade extinguished Plaintiffs' and the Class's
 16 freedom to choose between the Google Play Store and lower-cost market alternatives that would
 17 have been available had Google not restrained trade. Plaintiffs and the Class were also injured
 18 because Google's establishment and maintenance of supra-competitive pricing has caused a
 19 reduction in the output and supply of Android apps and in-app purchases, which would have been
 20 more abundantly available in a competitive market.

21 290. Plaintiffs and the Class have suffered and continue to suffer damages and irreparable
 22 injury, and such damages and injury will not abate until an injunction ending Google's
 23 anticompetitive conduct issues.

24 **COUNT 8: California Cartwright Act Unreasonable Restraints of Trade in the Android**
Application Distribution Market: Developer Agreements
(Against all Defendants except Google Payment)

25 291. Plaintiffs restate, reallege, and incorporate by reference each of the allegations set
 26 forth in the rest of this Complaint as if fully set forth herein.
 27
 28

1 292. Google's acts and practices detailed above violate the Cartwright Act, Cal. Bus. &
 2 Prof. Code § 16700 *et seq.*, which prohibits, *inter alia*, the combination of resources by two or more
 3 persons to restrain trade or commerce or to prevent market competition. *See id.* §§ 16720, 16726.

4 293. Under the Cartwright Act, a "combination" is formed when the anti- competitive
 5 conduct of a single firm coerces other market participants to involuntarily adhere to the
 6 anticompetitive scheme.

7 294. The Android Application Distribution Market is a valid antitrust market.

8 295. Google conditions distribution through the Google Play Store on entering into the
 9 standardized DDA described above, including the Developer Program Policies integrated therein.
 10 Through certain provisions in these agreements, Google forces app developers to submit to
 11 conditions that unreasonably restrain competition in the Android Application Distribution Market

12 296. Section 4.5 of the DDA provides that developers "may not use Google Play to
 13 distribute or make available any Product that has a purpose that facilitates the distribution of
 14 software applications and games for use on Android devices outside of Google Play." Section 4.1
 15 of the DDA requires that all developers "adhere" to Google's Developer Program Policies. Under
 16 the guise of its so-called "Malicious Behavior" Policy, Google prohibits developers from
 17 distributing apps that "download executable code [*i.e.*, code that would execute an app] from a
 18 source other than Google Play." The DDA further reserves to Google the right to remove and
 19 disable any Android app that it determines violates either the DDA or its Developer Program
 20 Policies and to terminate the DDA on these bases. (§§ 8.3, 10.3.) These provisions prevent app
 21 developers from offering competing app stores through the Google Play Store, even though there
 22 is no legitimate technological or other impediment to distributing a competing app store through
 23 the Google Play Store. In addition, the anti-forking agreements Google entered into with OEMs
 24 forbid OEMs from developing or distributing their own versions of Android to eliminate the
 25 technical hurdles Google has imposed on competing app stores.

26 297. These provisions have no legitimate or procompetitive purpose or effect, and
 27 unreasonably restrain competition in the Android Application Distribution Market.

1 298. Google's conduct and practices have substantial anticompetitive effects, including
2 increased prices to consumers and costs to developers, reduced innovation, poorer customer service,
3 and lowered output.

4 299. It is appropriate to bring this action under the Cartwright Act because many of the
5 illegal agreements were made in California and purport to be governed by California law, many
6 affected consumers reside in California, Google has its principal place of business in California,
7 and overt acts in furtherance of Google’s anticompetitive scheme took place in California.

8 300. Plaintiffs and the Class have been harmed by Defendants' anticompetitive conduct
9 in a manner that the Cartwright Act was intended to prevent. They paid more for Android apps and
10 in-app purchases than they would have paid in a competitive market. Plaintiffs and the Class have
11 also been injured because Google's unlawful restraints of trade extinguished Plaintiffs' and the
12 Class's freedom to choose between the Google Play Store and lower-cost market alternatives that
13 would have been available had Google not restrained trade. Plaintiffs and the Class have also been
14 injured because Google's establishment and maintenance of supra-competitive pricing has caused
15 a reduction in the output and supply of Android apps and in-app purchases, which would have been
16 more abundantly available in a competitive market.

17 301. Plaintiffs and the Class have suffered and continue to suffer damages and irreparable
18 injury, and such damages and injury will not abate until an injunction ending Google's
19 anticompetitive conduct issues.

COUNT 9: California Cartwright Act Unreasonable Restraints of Trade in the In-App Aftermarket
(Against all Defendants)

22 302. Plaintiffs restate, reallege, and incorporate by reference each of the allegations set
23 forth in the rest of this Complaint as if fully set forth herein.

24 303. Google's acts and practices detailed above violate the Cartwright Act, Cal. Bus. &
25 Prof. Code § 16700 *et seq.*, which prohibits, *inter alia*, the combination of resources by two or more
26 persons to restrain trade or commerce or to prevent market competition. *See id.* §§ 16720, 16726.

1 304. Under the Cartwright Act, a “combination” is formed when the anticompetitive
2 conduct of a single firm coerces other market participants to involuntarily adhere to the
3 anticompetitive scheme.

4 305. The In-App Aftermarket, which comprises of in-app distribution and payment
5 systems, is a valid antitrust market.

6 306. Google has monopoly power in the In-App Aftermarket.

7 307. Google conditions distribution through the Google Play Store on entering into the
8 standardized DDA described above, including the Developer Program Policies integrated therein.
9 Through certain provisions in these agreements, Google forces app developers to submit to
10 conditions that unreasonably restrain competition in the In-App Aftermarket.

11 308. Section 3.2 of the DDA requires that Android app developers enter into a separate
12 agreement with Google’s payment processor, Google Payment, to receive payment for apps and
13 content distributed through the Google Play Store. This includes payments related to in-app
14 purchases. Further, Google’s Developer Program Policies, compliance with which Section 4.1 of
15 the DDA makes obligatory, require that apps distributed through the Google Play Store “must use
16 Google Play In-app Billing [offered by Google Payment] as the method of payment” for in-app
17 purchases. While Google’s Policies exclude certain types of transactions from this requirement,
18 such as the purchase of “solely physical products” or of “digital content that may be consumed
19 outside of the app itself.”

20 309. These provisions have no legitimate or procompetitive purpose or effect, and
21 unreasonably restrain competition in the In-App Aftermarket.

22 310. Google’s conduct and practices have substantial anticompetitive effects, including
23 increased prices to consumers and costs to developers, reduced innovation, poorer customer service
24 and lowered output.

25 311. It is appropriate to bring this action under the Cartwright Act because many of the
26 illegal agreements were made in California and purport to be governed by California law, many
27 affected consumers reside in California, Google has its principal place of business in California and
28 overt acts in furtherance of Google’s anticompetitive scheme took place in California.

1 312. Plaintiffs and the Class have been harmed by Defendants' anticompetitive conduct
 2 in a manner that the Cartwright Act was intended to prevent. They paid more for Android apps and
 3 in-app purchases than they would have paid in a competitive market. Plaintiffs and the Class have
 4 also been injured because Google's unlawful restraints of trade extinguished Plaintiffs' and the
 5 Class's freedom to choose between the Google Play Store and lower-cost market alternatives that
 6 would have been available had Google not restrained trade. Plaintiffs and the Class have also been
 7 injured because Google's establishment and maintenance of supra-competitive pricing has caused
 8 a reduction in the output and supply of Android apps and in-app purchases, which would have been
 9 more abundantly available in a competitive market.

10 313. Plaintiffs and the Class have suffered and continue to suffer damages and irreparable
 11 injury, and such damages and injury will not abate until an injunction ending Google's
 12 anticompetitive conduct issues.

**COUNT 10: California Cartwright Act Tying In-App Distribution, Including Google Play
 Billing, to the Google Play Store
 (Against all Defendants)**

15 314. Plaintiffs restate, reallege, and incorporate by reference each of the allegations set
 16 forth in the rest of this Complaint as if fully set forth herein.

17 315. Google's acts and practices detailed above violate the Cartwright Act, Cal. Bus. &
 18 Prof. Code § 16700 *et seq.*, which prohibits, *inter alia*, the combination of resources by two or more
 19 persons to restrain trade or commerce, or to prevent market competition. *See id.* §§ 16720, 16726.

20 316. Under the Cartwright Act, a "combination" is formed when the anticompetitive
 21 conduct of a single firm coerces other market participants to involuntarily adhere to the
 22 anticompetitive scheme.

23 317. The Cartwright Act also makes it "unlawful for any person to lease or make a sale
 24 or contract for the sale of goods, merchandise, machinery, supplies, commodities for use within the
 25 State, or to fix a price charged therefor, or discount from, or rebate upon, such price, on the
 26 condition, agreement or understanding that the lessee or purchaser thereof shall not use or deal in
 27 the goods, merchandise, machinery, supplies, commodities, or services of a competitor or
 28 competitors of the lessor or seller, where the effect of such lease, sale, or contract for sale or such

1 condition, agreement or understanding may be to substantially lessen competition or tend to create
 2 a monopoly in any line of trade or commerce in any section of the State.” *Id.* § 16727.

3 318. As detailed above, Google has unlawfully tied in-app distribution, including its
 4 payment system, Google Play Billing, to the Google Play Store through its DDAs with app
 5 developers and its Developer Program Policies.

6 319. Google has sufficient economic power in the tying market, the Android App
 7 Distribution Market, to affect competition in the tied market, the Android In-App Aftermarket. With
 8 Google Play Store installed on nearly all Android OS devices and over 90% of downloads on
 9 Android OS devices being performed by the Google Play Store, Google has overwhelming market
 10 power. Google’s market power is further evidenced by its ability to extract supra-competitive taxes
 11 on the sale of apps through the Google Play Store.

12 320. The availability of the Google Play Store for app distribution is conditioned on the
 13 app developer accepting a second product, the In-App Aftermarket, which includes Google Play
 14 Billing, Google’s in-app payment system. Google’s requirement that developers to distribute
 15 through (and pay the toll for) Google Play forever forecloses alternative app distribution and
 16 payment systems.

17 321. The tying product, the Google Play Store, is separate and distinct from the tied In-
 18 App Aftermarket, including Google Play Billing, because, but for Google’s restrictions, app
 19 developers have alternative distribution and in-app payment system options and would prefer to
 20 choose among them independently of how an Android app is distributed. Google’s unlawful tying
 21 arrangement thus ties two separate products that are in separate markets.

22 322. Google’s conduct forecloses competition in the In-App Aftermarket, affecting a
 23 substantial volume of commerce in these Markets.

24 323. Google has thus engaged in a *per se* illegal tying arrangement, and the Court does
 25 not need to engage in a detailed assessment of the anticompetitive effects of Google’s conduct or
 26 its purported justifications.

1 324. Even if Google’s conduct does not form a *per se* illegal tie, an assessment of the
2 tying arrangement would demonstrate that it is unreasonable under the Cartwright Act, and
3 therefore, illegal.

4 325. Google's acts and practices detailed above unreasonably restrained competition in
5 the In-App Aftermarket.

6 326. It is appropriate to bring this action under the Cartwright Act because many of the
7 illegal agreements were made in California and purport to be governed by California law, many
8 affected consumers reside in California, Google has its principal place of business in California,
9 and overt acts in furtherance of Google’s anticompetitive scheme took place in California.

327. Plaintiffs and the Class have been harmed by Defendants' anticompetitive conduct
in a manner that the Cartwright Act was intended to prevent. They paid more for Android apps and
in-app purchases than they would have paid in a competitive market. Plaintiffs and the Class have
also been injured because Google's unlawful restraints of trade extinguished Plaintiffs' and the
Class's freedom to choose between the Google Play Store and lower-cost market alternatives that
would have been available had Google not restrained trade. Plaintiffs and the Class have also been
injured because Google's establishment and maintenance of supra-competitive pricing has caused
a reduction in the output and supply of Android apps and in-app purchases, which would have been
more abundantly available in a competitive market.

19 328. Plaintiffs and the Class have suffered and continue to suffer damages and irreparable
20 injury, and such damages and injury will not abate until an injunction ending Google's
21 anticompetitive conduct issues.

COUNT 11: California Unfair Competition Law, Cal. Bus. & Prof. Code Section 17200 et seq. (“Section 17200” or the “UCL”)

(Against all Defendants)

329. Plaintiffs restate, reallege, and incorporate by reference each of the allegations set
forth in the rest of this Complaint as if fully set forth herein.

26 330. The UCL defines unfair competition to include any “unlawful, unfair or fraudulent
27 business act or practice and unfair, deceptive, untrue or misleading advertising and any act

1 prohibited by Chapter 1 (commencing with § 17500) of Part 3 of Division 7 of the Business and
 2 Professions Code.” See California Business and Professions Code § 17200.

3 331. Google violated the UCL by engaging in unlawful, unfair, and deceptive business
 4 acts and practices.

5 332. Google is a “person” as defined by Cal. Bus. & Prof. Code § 17201.

6 333. Pursuant to Cal. Bus. & Prof. Code § 17204, each of the Plaintiffs named herein,
 7 and the members of the proposed Class have suffered injury in fact and have lost money or property
 8 because of the unfair competition set forth herein. Specifically, Plaintiffs and Class Members
 9 overpaid for apps and in-app digital content due to Google’s anticompetitive conduct, losing the
 10 benefit of their bargain in making the purchases due to the overpayment. Plaintiffs intend to make
 11 future purchases of apps and in-app digital content, and are therefore irreparably harmed by the
 12 ongoing violations of the law alleged herein.

13 334. In accordance with the liberal application and construction of the UCL, application
 14 of the UCL to all Class Members is appropriate, given that: Google’s conduct (as described herein)
 15 originated from California; the aforementioned agreements, business plans, and Android OS code
 16 originated in California; and the Google Play Terms of Service, which were unilaterally drafted by
 17 Google and are uniform to Plaintiffs and all Class Members, provide that California law shall apply.

18 335. Google Play’s uniform Terms of Service govern the reach of Plaintiffs’ and the
 19 Class’s claims because Google’s violations of the UCL were caused, at least in part, by and through
 20 Plaintiffs’ and the Class’s use of the Google Play Store.

21 **Google’s Conduct is Unlawful**

22 336. A business act or practice is “unlawful” pursuant to the UCL if it violates any other
 23 law or regulation.

24 337. California Cartwright Act, Cal. Bus. & Prof. Code § 16700 *et seq.*, prohibits
 25 unlawful monopolization, monopoly maintenance, and monopoly tying pursuant to Cal. Bus. &
 26 Prof. Code §§ 16720, 16726, 16727.

27 338. California has a clearly established public policy forbidding monopolistic acts. As
 28 alleged herein, Google willfully and wrongfully acquired, and unlawfully maintained, monopoly

1 power in the relevant markets, defined above, to coerce the purchase of apps and in-app purchases
 2 at artificially inflated prices.

3 339. Thus, because of Google’s acts and conduct, alleged herein, competition in the
 4 Android Application Distribution Market and In-App Aftermarket was diminished. Google’s
 5 conduct and practices, as alleged herein, have had substantial anticompetitive effects, including
 6 increased prices to consumers and costs to developers, reduced innovation, and lowered output.

7 340. Google’s conduct was a violation of Cal. Bus. & Prof. Code §§ 16720, 16726,
 8 16727, giving rise to liability for unlawful acts pursuant to the UCL.

9 341. Section 1 of the Sherman Act, 15 U.S.C. §1, prohibits “[e]very contract,
 10 combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce
 11 among the several States, or with foreign nations.” Section 2 of the Sherman Act, 15 U.S.C. §2,
 12 prohibits the “monopoliz[ation of] any part of the trade or commerce among the several States, or
 13 with foreign nations.” As alleged herein, Google’s conduct violated the aforementioned sections of
 14 the Sherman Act, thus giving rise to liability for unlawful conduct under the UCL.

15 **Google’s Conduct is Unfair**

16 342. A business practice is “unfair” pursuant to the UCL if it is immoral, unethical,
 17 oppressive, unscrupulous, or substantially injurious to consumers.

18 343. Google’s “unfair” acts and practices include executing agreements with OEMs that
 19 unreasonably restrict competition in the Android Application Distribution Market, such as anti-
 20 forking agreements and MADAs that require OEMs to offer the Google Play Store as the primary—
 21 and practically the only—app store on Android mobile devices. These agreements further prevent
 22 OEMs from offering alternative app stores on Android mobile devices in any prominent visual
 23 positioning.

24 344. Google also engaged in “unfair” acts and practices when it conditioned distribution
 25 through the Google Play Store on entering standardized DDAs, including the Developer Program
 26 Policies integrated therein. Through certain provisions in these agreements, Google forces app
 27 developers to submit to conditions that unreasonably restrain trade in the Android Application
 28 Distribution Market. For example, Section 4.5 of the DDA provides that developers “may not use

1 Google Play to distribute or make available any Product that has a purpose that facilitates the
 2 distribution of software applications and games for use on Android devices outside of Google Play.”
 3 Section 4.1 of the DDA requires that all developers “adhere” to Google’s Developer Program
 4 Policies. Under the guise of its so-called “Malicious Behavior” Policy, Google prohibits developers
 5 from distributing apps that “download executable code [*i.e.*, code that would execute an app] from
 6 a source other than Google Play.” The DDA further reserves to Google the right to remove and
 7 disable any Android app that it determines violates either the DDA or its Developer Program
 8 Policies and to terminate the DDA on these bases. (§§ 8.3, 10.3.) These provisions prevent app
 9 developers from offering competing app stores through the Google Play Store, even though there
 10 is no legitimate technological or other impediment to distributing a competing app store through
 11 the Google Play Store. In addition, the anti-forking agreements Google entered into with OEMs
 12 forbid OEMs from developing or distributing their own versions of Android to eliminate the
 13 technical hurdles Google has imposed on competing app stores.

14 345. Google further engaged in “unfair” acts and practices by conditioning distribution
 15 through the Google Play Store on entering into the standardized DDA, as described above, including
 16 the Developer Program Policies integrated therein. Through certain provisions in these agreements,
 17 Google forced app developers to submit to conditions that unreasonably restrain competition in the
 18 In-App Aftermarket. Section 3.2 of the DDA requires that Android app developers enter into a
 19 separate agreement with Google’s payment processor, Google Play Billing, to receive payment for
 20 apps and content distributed through the Google Play Store. This includes payments related to in-
 21 app purchases. Further, Google’s Developer Program Policies, compliance with which Section 4.1
 22 of the DDA makes obligatory, require that apps distributed through the Google Play Store “must
 23 use Google Play In-app Billing [offered by Google Payment] as the method of payment” for in-app
 24 purchases. While Google’s Policies exclude certain types of transactions from this requirement,
 25 such as the purchase of “solely physical products” or of “digital content that may be consumed
 26 outside of the app itself.”

27
 28

1 346. Google further engaged in “unfair” acts and practices by unlawfully tying its app
 2 and in-app payment system, Google Play Billing, to the Google Play Store through its DDAs with
 3 app developers and its Developer Program Policies, as detailed above.

4 347. Google further engaged in “unfair” acts and practices by imposing unnecessary
 5 technological barriers to the direct distribution of applications and alternative application stores.

6 348. Google engaged in this conduct to gain an unfair commercial advantage over its
 7 competitors. It acted to withhold critical and material information about its conduct from Plaintiffs
 8 and Class Members, competitors, and the marketplace, all to its unfair competitive advantage.

9 349. Google’s conduct is unfair as it violates state and federal anti-trust laws and violates
 10 the policy and spirit of these antitrust laws. The effect of Google’s wrongful conduct significantly
 11 threatens and harms competition.

12 350. Accordingly, as alleged herein, Google’s acts and practices are unfair in violation of
 13 the UCL because they offend public policy; are immoral, unethical, oppressive, outrageous,
 14 unscrupulous, and substantially injurious; and caused substantial harm, including in the form of
 15 artificially inflated prices, that greatly outweigh any possible utility from the practices.

16 351. Google’s business practices, as alleged herein, are unfair because: (1) the injury to
 17 consumers is substantial; (2) the injury is not outweighed by any countervailing benefits to
 18 consumers or competition; and (3) consumers could not avoid paying Google’s monopolistic prices
 19 because there were no viable alternatives, and there were reasonably available alternatives to further
 20 Google’s legitimate business interests, other than the conduct described herein.

21 352. The conduct alleged herein occurs and continues to occur in Google’s business.
 22 Google’s wrongful conduct is part of a pattern or generalized course of conduct repeated on scores
 23 of occasions daily.

24 353. Consumers, including Plaintiffs and Class Members, have been injured because they
 25 have been deprived of choice, and have paid inflated prices for apps, in-app digital content and
 26 subscriptions, which inflated prices they otherwise would not have had to pay in the absence of
 27 Google’s anti-competitive conduct. Plaintiffs and the Class’s injury is the kind of injury that the
 28 antitrust laws were designed to prevent and flows from Google’s unlawful conduct.

Google's Conduct is Fraudulent

354. A business act or practice is “fraudulent” under the UCL if it is likely to deceive members of the consuming public.

355. As alleged herein, Google repeatedly made false and misleading representations to Plaintiffs and Class Members that were likely to deceive, and did deceive, Plaintiffs and Class Members. For example, Google repeatedly misrepresented the “openness” of Android and the Play Store, which Plaintiffs and Class Members, as reasonable consumers, would reasonably have understood to mean that Google did not engage in the anticompetitive practices alleged herein. Plaintiffs and Class Members could not have reasonably discovered and made informed decisions based on Google’s anticompetitive conduct—let alone consent to them simply by purchasing an Android device. Google’s representations that “Android is about choice”, is “freedom of choice for consumers”, is a “competitive ecosystem” were false and misleading for similar reason.

356. Google’s business practices, as alleged herein, constitute fraudulent conduct because it was likely to deceive, and did deceive, Plaintiffs and Class Members into purchasing apps, making in-app purchases, and subscribing to apps, among other things, at prices that were higher than Plaintiffs and the Class would have paid in an otherwise competitive market. Indeed, Google’s conduct foreclosed Plaintiffs’ and the Class’s freedom to choose between the Google Play Store and lower-cost market alternatives that would have been available had Google not gained its unfair commercial advantage.

357. Google's representations and omissions—all of which emanated from California—were material because they were likely to, and did, deceive reasonable consumers, including Plaintiffs and Class Members.

358. As a direct and proximate result of Google’s unfair, unlawful, and fraudulent acts and practices, Plaintiff and Class Members were injured and lost money, as set forth in § 17204 of the UCL, including because they paid more for Android apps and in-app purchases than they would have paid in a competitive market. Plaintiffs and the Class have also been injured because Google’s unlawful restraints of trade extinguished Plaintiffs’ and the Class’s freedom to choose between the Google Play Store and lower-cost market alternatives that would have been available had Google

1 not restrained trade. Plaintiffs and the Class were also injured because Google's establishment and
 2 maintenance of supra-competitive pricing has caused a reduction in the output and supply of
 3 Android apps and in-app purchases, which would have been more abundantly available in a
 4 competitive market. In turn, Google has been unjustly enriched at the expense of Plaintiffs and
 5 Class Members. Specifically, Defendants have been unjustly enriched by obtaining supra-
 6 competitive revenues and profits that they would not have otherwise obtained (or were permitted
 7 to avoid losses) absent their false, misleading, and deceptive conduct.

8 359. There is no utility to be served by Google's conduct that in any way outweighs the
 9 gravity of the harm caused to consumers, Plaintiffs, and Class Members. In addition, Google's
 10 conduct was, and remains, substantially injurious to consumers and competitors; is not outweighed
 11 by any countervailing benefits to consumers or competitors; and Plaintiffs and Class Members
 12 could not reasonably avoid the injury caused by Google's conduct and misrepresentations.

13 360. Google acted intentionally, willfully, knowingly, and maliciously to violate
 14 California's Unfair Competition Law, and recklessly disregarded Plaintiffs' and Class Members'
 15 rights.

16 361. Plaintiffs and Class Members seek all monetary and non-monetary relief allowed by
 17 law, including restitution of all overcharges stemming from Google's unfair, unlawful, and
 18 fraudulent business practices; declaratory relief; reasonable attorneys' fees and costs under
 19 California Code of Civil Procedure § 1021.5; injunctive relief; and other appropriate equitable
 20 relief. Pursuant to § 17203 of the UCL, Plaintiffs seek an order from the Court requiring Google to
 21 make restitution to Plaintiffs and the Class in the amounts by which Google has overcharged them,
 22 and to enjoin Google from continuing to violate the UCL and/or from violating the UCL in the
 23 future. Otherwise, Plaintiffs and Class Members, and the public at large, may be irreparably harmed
 24 and/or denied an effective and complete remedy, if such an order is not granted, including because
 25 they continue to use the Google Play Store to purchase the products identified herein.

26 362. This count is timely brought within the operable statute of limitations set forth in
 27 Cal. Bus. & Prof. Code § 17208 in that Google's misconduct is a continuing wrong and its violations
 28 alleged herein are ongoing, subjecting Plaintiffs and the Class to continuing harm.

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs respectfully request that the Court enter judgment in favor of Plaintiffs and against Defendants:

- A. Certify the Action as a class action, appoint Plaintiffs as class representatives, and appoint Co-Lead Counsel as Class Counsel;
 - B. Permanently enjoining Defendants from monopolizing the Android Application Distribution Market and engaging in anticompetitive conduct in the In-App Aftermarket;
 - C. Permanently enjoining Defendants from engaging in anticompetitive conduct in connection with their agreements with OEMs, Mobile Network Carriers and app developers;
 - D. Awarding Plaintiffs and the Class treble damages for injuries caused by Defendants' violations of the federal antitrust laws and California's Cartwright Act, and making restitution to Plaintiffs and the Class for their injuries pursuant to the UCL;
 - E. Awarding Plaintiffs and the Class reasonable attorneys' fees and costs; and
 - F. Granting such other and further relief as the Court may deem just and proper.

JURY TRIAL DEMAND

Pursuant to Rule 38(b) of the Federal Rules of Civil Procedure, Plaintiffs demand a jury trial of all issues so triable.

Dated: December 3, 2021

1
2 Respectfully submitted,

3 By: /s/ Karma M. Julianelli

4 **BARTLIT BECK LLP**

5 Karma M. Julianelli (SBN 184175)
Glen E. Summers (SBN 176402)
Jameson R. Jones (*pro hac vice*)
1801 Wewatta St., Suite 1200
Denver, CO 80202
Telephone: (303) 592-3100
Facsimile: (303) 592-3140
karma.giulianelli@bartlitbeck.com
glen.summers@bartlitbeck.com
jameson.jones@bartlitbeck.com

11 John Byars (*pro hac vice*)
Lee Mason (*pro hac vice*)
54 W. Hubbard St., Suite 300
Chicago, IL 60654
Telephone: (312) 494-4400
Facsimile: (312) 494-4440
john.byars@bartlitbeck.com
lee.mason@bartlitbeck.com

16 **KOREIN TILLERY, LLC**

17 George A. Zelcs (*pro hac vice*)
Robert E. Litan (*pro hac vice*)
Randall Ewing, Jr. (*pro hac vice*)
205 North Michigan, Suite 1950
Chicago, IL 60601
Telephone: (312) 641-9750
Facsimile: (312) 641-9751
gzelcs@koreintillery.com
rlitan@koreintillery.com
rewing@koreintillery.com
jbyter@koreintillery.com

23 Stephen M. Tillery (*pro hac vice*)
Michael E. Klenov (SBN 277028)
Carol O'Keefe (*pro hac vice*)
505 North 7th Street, Suite 3600
St. Louis, MO 63101
Telephone: (314) 241-4844
Facsimile: (314) 241-3525
stillery@koreintillery.com
jboyer@koreintillery.com

1
2 By: /s/ Hae Sung Nam

3 **KAPLAN FOX & KILSHEIMER LLP**

4 Hae Sung Nam (*pro hac vice*)
Robert N. Kaplan (*pro hac vice*)
Frederic S. Fox (*pro hac vice*)
Donald R. Hall (*pro hac vice*)
Aaron L. Schwartz (*pro hac vice*)
850 Third Avenue
New York, NY 10022
Tel.: (212) 687-1980
Fax: (212) 687-7715
hnam@kaplanfox.com
rkaplan@kaplanfox.com
ffox@kaplanfox.com
dhall@kaplanfox.com
aschwartz@kaplanfox.com

5 **KAPLAN FOX & KILSHEIMER LLP**

6 Laurence D. King (SBN 206423)
Kathleen A. Herkenhoff (SBN 168562)
1999 Harrison Street, Suite 1560
Oakland, CA 94612
Telephone: 415-772-4700
Facsimile: 415-772-4707
lking@kaplanfox.com
kherkenhoff@kaplanfox.com

7 **PRITZKER LEVINE, LLP**

8 Elizabeth C. Pritzker (SBN 146267)
Bethany Caracuzzo (SBN 190687)
Caroline Corbitt (SBN 305492)
1900 Powell Street, Suite 450
Emeryville, CA 94608
Telephone: (415) 805-8532
Facsimile: (415) 366-6110
ecp@pritzkerlevine.com
bc@pritzkerlevine.com
ccc@pritzkerlevine.com

1 mklenov@koreintillery.com
2 cokeefe@koreintillery.com
3
4

5 **COTCHETT, PITRE & MCCARTHY,
6 LLP**

7 Nanci E. Nishimura (SBN 152621)
8 Adam J. Zapala (SBN 245748)
9 Elizabeth T. Castillo (SBN 280502)
10 Tamarah P. Prevost (SBN 313422)
11 Noorjahan Rahman (SBN 330572)
12 San Francisco Airport Office Center
13 840 Malcolm Road, Suite 200
14 Burlingame, CA 94010
15 Telephone: (650) 697-6000
16 Facsimile: (650) 697-0577
17 nnishimura@cpmlegal.com
18 azapala@cpmlegal.com
19 ecastillo@cpmlegal.com
20 tprevost@cpmlegal.com
21 nrhman@cpmlegal.com

22 *Counsel for the Proposed Class*

23 **MILBERG PHILLIPS GROSSMAN LLP**

24 Peggy J. Wedgworth (*pro hac vice*)
25 Robert A. Wallner (*pro hac vice*)
26 Elizabeth McKenna (*pro hac vice*)
27 Blake Yagman (*pro hac vice*)
28 Michael Acciavatti (*pro hac vice*)
One Penn Plaza, Suite 1920
New York, New York 10119
Telephone: 212-594-5300
Facsimile: 212-868-1229
pwedgworth@milberg.com
rwallner@milberg.com
emckenna@milberg.com
byagman@milberg.com
macciavatti@milberg.com

1 **CERTIFICATE OF SERVICE**

2 The undersigned certifies that a true and correct copy of the foregoing was served on
3 December 3, 2021 upon all counsel of record via the Court's electronic notification system.

4

5 */s/ Karma M. Julianelli*

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28